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BUSINESS WEEK

A McGRAW-HILL PUBLICATION FIFTY CENTS JAN. 23, 1960

SPECIAL REPORT (page 52)

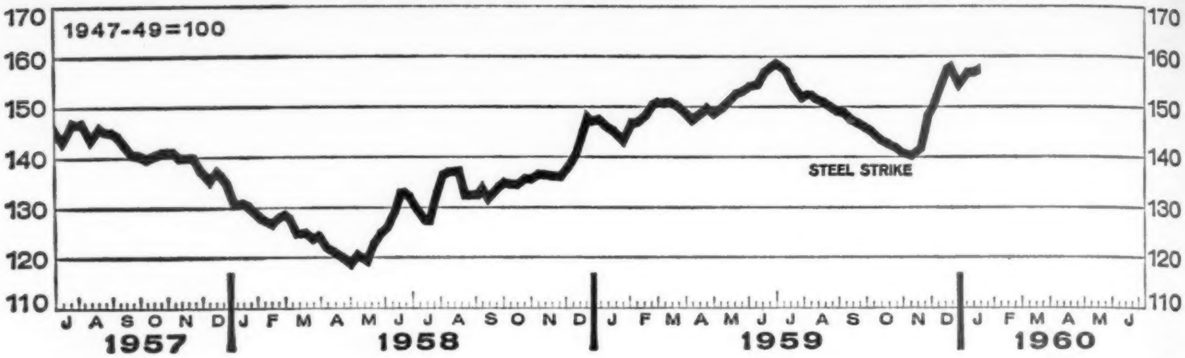
The U.S. invents a NEW way to grow

In BUSINESS this WEEK *January 23, 1960*

BUSINESS WEEK is published weekly by McGraw-Hill Publishing Co., Inc., 330 W. 42nd St., N. Y. 36, N. Y. Second Class Postage Paid at N. Y. 1, N. Y., and at Albany, N. Y. Subscriptions $6 a year in U. S. A. Canadian and foreign rates on request.

NUMBER 1586

FIGURES of the WEEK



	1953-55 Average	Year Ago	Month Ago	Week Ago	§ Latest Week
BUSINESS WEEK INDEX (chart)	**133.3**	**145.5**	**159.0**	**157.1**r	**158.4***
PRODUCTION					
Steel ingot (thous. of tons)	2,032	2,056	2,641	2,727r	**2,712**
Automobiles	125,553	135,953	149,707	163,249r	**176,245**
Engineering const. awards (Eng. News-Rec. 4-wk. daily av. in thous.)	$52,412	$60,147	$60,829	$56,638	**$55,038**
Electric power (millions of kilowatt-hours)	10,819	13,324	14,150	14,308	**14,236**
Crude oil and condensate (daily av., thous. of bbl.)	6,536	7,087	7,137	7,112	**7,146**
Bituminous coal (daily av., thous. of tons)	1,455	1,366	1,529	1,465r	**1,500**
Paperboard (tons)	247,488	305,778	317,809	261,488[1]	**324,592**
TRADE					
Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars)	70	53	62	59	**58**
Carloadings: all others (daily av., thous. of cars)	47	39	45	38	**40**
Department store sales index (1947-49 = 100, not seasonally adjusted)	121	121	298	112r	**132**
Business failures (Dun & Bradstreet, number)	198	294	285	242	**292**
PRICES					
Industrial raw materials, daily index (BLS, 1947-49 = 100)	89.2	89.2	93.5	93.6	**94.7**
Foodstuffs, daily index (BLS, 1947-49 = 100)	90.5	79.4	70.3	71.[illegible]	**72.3**
Print cloth (spot and nearby, yd.)	19.8¢	18.2¢	23.0¢	22.9¢	**22.9¢**
Finished steel, index (BLS, 1947-49 = 100)	143.9	187.0	186.8	186.8	**186.8**
Scrap steel composite (Iron Age, ton)	$36.10	$41.17	$41.17	$41.50	**$41.83**
Copper (electrolytic, delivered price, E&MJ, lb.)	32.394¢	29.020¢	34.200¢	34.035¢	**33.800¢**
Aluminum, primary pig (U. S. del., E&MJ, lb.)	20.6¢	24.7¢	25.4¢	26.0¢	**26.0¢**
Aluminum, secondary alloy #380, 1% zinc (U. S. del., E&MJ, lb.)	‡	21.76¢	23.93¢	25.01¢	**25.05¢**
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	$2.34	$1.99	$2.14	$2.07	**$2.07**
Cotton, daily price (middling, 1 in., 14 designated markets, lb.)	34.57¢	34.28¢	31.83¢	31.88¢	**31.91¢**
Wool tops (Boston, lb.)	$1.96	$1.63	$1.86	$1.85	**$1.83**
FINANCE					
500 stocks composite, price index (S&P's, 1941-43 = 10)	31.64	55.82	59.07	58.89	**57.81**
Medium grade corporate bond yield (Baa issues, Moody's)	3.59%	4.87%	5.29%	5.33%	**5.34%**
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate)	2-2⅛%	3¼%	4⅞%	4⅞%	**5%**
BANKING (Millions of Dollars)					
Demand deposits adjusted, reporting member banks	‡	62,886	63,446	61,967	**62,435**
Total loans and investments, reporting member banks	‡	102,337	105,330	103,914	**103,996**
Commercial, industrial, and agricultural loans, reporting member banks	‡	31,751	31,342	31,089	**31,032**
U. S. gov't guaranteed obligations held, reporting member banks	‡	33,801	27,783	27,081	**27,406**
Total federal reserve credit outstanding	26,424	27,708	29,365	29,318	**28,633**

MONTHLY FIGURES OF THE WEEK

		1953-55 Average	Year Ago	Month Ago	Latest Month
Cost of living (U. S. Dept. of Labor BLS, 1947-49=100)	**December**	101.5	91.2	92.3	**82.3**
Housing starts (in thousands)	**December**	62.2	64.0	65.6	**65.7**
Employment (in millions)	**December**	2.5	4.1	3.7	**3.6**
Unemployment (in millions)	**December**	$296.1	$366.9	$386.9	**$390.7**
Personal income (seasonally adjusted, in billions)	**December**	$16.0	$18.1	$15.4	**$16.5**
Farm income (seasonally adjusted, in billions)	**December**	$158.1	$239.0	$217.1	**$261.1**
Bank debits (in billions)	**December**	114.6	123.7	125.6	**125.5**
Wholesale prices (U. S. Dept. of Labor BLS, 1947-49=100)	**December**	110.4	119.2	118.9	**118.9**
Average weekly earnings in manufacturing	**December**	$73.36	$88.04	$88.98	**$91.53**

* *Preliminary, week ended January 16, 1960.*
‡ *Not available.*
[1] *January 1-9, 1960.*
r Revised.
§ *Date for 'Latest Week' on each series on request.*

THE PICTURES—Cover—Frank Ronan; 25—Sovfoto; 32, 33—Ed Malsberg; 56—Arnold Jenkin; 58, 59—Esso Standard Oil Co.; 60—(lt. & cen.) Standard Oil Co. (N. J.); 61—(top) Manley for Baton Rouge Ch. of Commerce, (cen. rt.) (bot.) Standard Oil Co. (N. J.); 67, 68, 73, 75, 76, 79, 81—Arnold Jenkins; 83—Sovfoto; 88—McGraw-Hill World News; 94—Singer Sewing Machine Co.; 104, 105—Grant Compton; 111—London Express from Pictorial Parade; 114—UPI.

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READERS REPORT

Too Many Payoffs

Dear Sir:

The issue [BW—Dec.5'59,p29] certainly hits the nail on the head regarding changes in business practices since 1945.

I sold for 25 years without—to my knowledge—ever having to buy or pay for any business. It looks like it is coming to the point you cannot do business without a payoff somewhere down the line.

You used to sell on quality, price, and what personality you had to create acceptance to the trade and create good will for yourself and your product. A handout was never thought of, and few would have accepted it in my part of the country 15 or 20 years ago.

A bribe would have automatically given you undisputed access to a wide open door, going one way.

W. H. COOPER
PANAMA CITY, FLA.

Note for Congressmen

Dear Sir:

Any day now a Congressional investigator will look for bones in animal crackers.

F. J. BARRABEE
BISBEE, ARIZ.

New Import Program

Dear Sir:

Regarding your article Bracing for Foreign Competition [BW—Nov.7'59,p47], I was surprised to see that so little imagination has been forthcoming on how to deal with such inroads. Apparently, U. S. businessmen can only chant "back to the barricades" or "let's hope it won't hit us."

Since the whole problem is based primarily on the lower import goods prices achieved through lower labor costs overseas, I would propose a "productive" tariff as follows—apply tariffs on competitive products to equate import goods prices with those prevailing here, then institute a rebate program through bilateral agreement between the United States and the competing nations by which the amount of the tariffs applied would be redistributed in hourly wage increases to the labor force within the original competing industries.

The effects would be twofold: (1) Competition would be re-established on the accepted U. S. stand-

ards of quality, service, and product innovation, and (2) the living standards of those overseas would develop in an upward direction as the higher income effects filter through the home economies.

Obviously, such a program would involve considerable realignment in the traditional thinking that has been displayed thus far on both the domestic and international level, but it could be a means of achieving the eventual benefits of free world trade (our only real long-term pattern for peace) without lowering our own standard of living through major employment upheavals. . . .

STEPHEN A. FARKAS
EAST CLEVELAND, OHIO

Well Done

Dear Sir:

I have read with interest and pleasure the article When a Company Wants Brass, Executive Searchers Go to Work [BW—Dec. 5'59,p142]. It's the most accurate and best balanced statement about executive recruiting that I've seen in print.

PAUL T. STAFFORD
STAFFORD & HERSLOFF
EXECUTIVE RECRUITING
CONSULTANTS
NEW YORK, N. Y.

One Zero Too Many

Dear Sir:

The Industries section [BW—Jan.9'60,p90] carried an article entitled Drug Men Bet on Bolder, Deeper Research. Page 92 includes the sentence, "Parke, Davis, for example, is spending 50% of its research budget on the riddle of cancer." The correct figure is 5%.

LEON A. SWEET
VICE-PRES., RESEARCH DIV.
PARKE, DAVIS & CO.
DETROIT, MICH.

Organ Patents

Dear Sir:

The article on C. G. Conn, Ltd. [BW—Jan.2'60,p87] may create the impression that Conn still retains exclusive rights to my electronic organ patents. Radio Corp. of America has a non-exclusive license . . . to use these patents. Conn had an otherwise exclusive license to use them from 1944 to 1953. Since then I have been free to offer these patents to other manufacturers.

SPENCER W. MCKELLIP
VILLANOVA, PA.

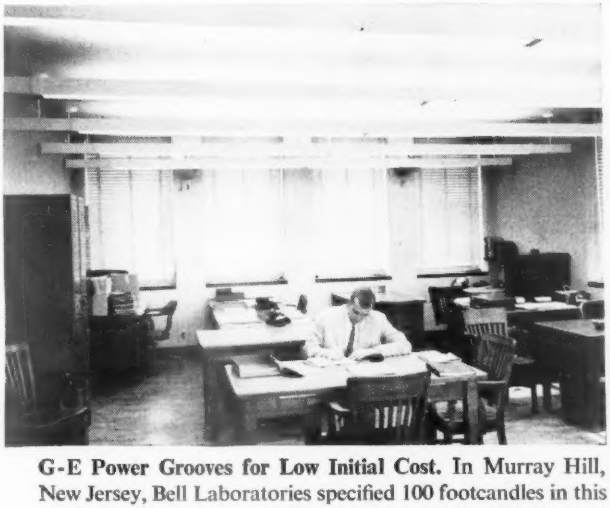
How three companies use . . .

G-E Power Grooves for Sales Lighting. If you have products to display and sell, G-E Power Groove Lamps can play a vital role, as in the Fontius Shoe Stores, Denver, where 300 footcandles make shoe selection easy—and *fast!*

G-E Power Grooves for High Lighting Levels. Assembly Products, Inc., Chesterland, Ohio, gets 250 footcandles with mighty G-E Power Grooves—eliminated supplementary lighting, and saved *50¢ a square foot initial cost* at the same time!

General Electric Power Groove Lamps

. . . and get the lighting results they want



G-E Power Grooves for Low Initial Cost. In Murray Hill, New Jersey, Bell Laboratories specified 100 footcandles in this engineering office and got it most economically with General Electric Power Groove Lamps.

Conclusion:

You get more and more light for your money . . . year after year . . . with G-E Lamps

Ask your General Electric Lamp distributor which G-E Lamps are *best* for your particular job. General Electric Co., Large Lamp Dept. C-01, Nela Park, Cleveland 12, O.

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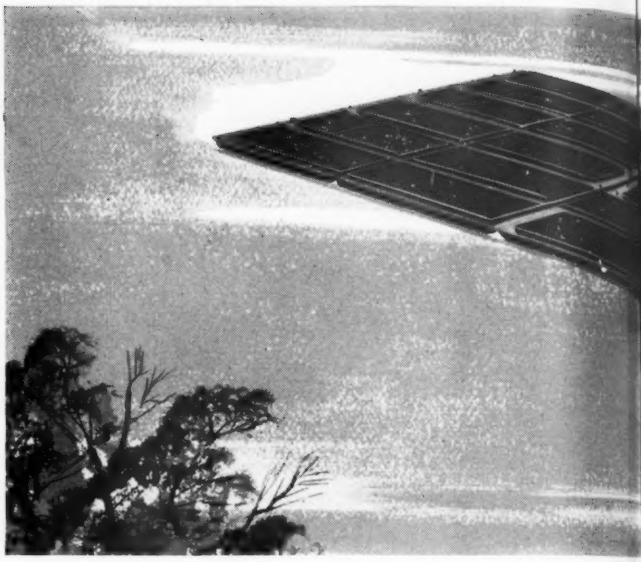
The area is served by the Ohio River and the St. Lawrence Seaway. In addition, a network of railroads and 1000 miles of Inter-state highways provide fast, direct access to nearby billion-dollar markets.

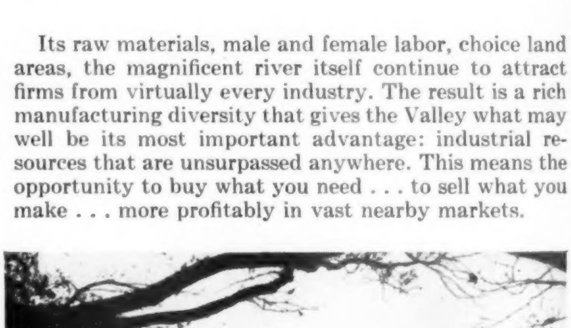
. . . and because American Electric combines the advantages of nearby coal supply with the most advanced power technology, you are assured of virtually unlimited, low-cost electric power.



ONE EXAMPLE: The Ohio River Valley

with its outstanding industrial resources . . . is among the nation's fastest growing industrial areas!

Its raw materials, male and female labor, choice land areas, the magnificent river itself continue to attract firms from virtually every industry. The result is a rich manufacturing diversity that gives the Valley what may well be its most important advantage: industrial resources that are unsurpassed anywhere. This means the opportunity to buy what you need . . . to sell what you make . . . more profitably in vast nearby markets.



View of a typical plant site available in the Ohio Valley Area.

Included among the Valley's industrial resources are steel and coal production; aluminum; nickel, ferroalloys; plastic; glass; packaging; one of the world's heaviest chemical complexes; and—now—vast new petro-chemical installations.

Within this growing, prosperous area, the American Electric Power Company can help you choose from a large selection of sites expressly held for plant location.

This thimble—actual size—greatly magnified on the left, contains 1,053 PSI Micro-Diodes. The standard subminiature diode is shown below. (Photos by Don Mannix.)

RESEARCH TODAY---
NEW PRODUCTS TOMORROW

More "brains" per thimbleful—

The modern digital computer or "electronic brain" employs a large number of identical solid state electronic circuits much as the human brain uses many identical brain cells.

The new PSI Micro-Diode—so small that a thousand fit into a thimble and yet with performance and reliability characteristics second to none—will help make practical computers with greatly increased "brain capacity."

The Micro-Diode, a result of three years of research in the laboratories of TRW's Pacific Semiconductors, Inc., is one of the new products that should enable PSI to continue the dramatic growth that has in the last two years made it one of the nation's principal producers of semiconductor devices.

A major part of TRW's 2500 professional scientists and engineers are engaged in such company-supported research activities. Large though this program is, the cost is small when compared with the greatly increased future productivity that results from competent research in growth fields.

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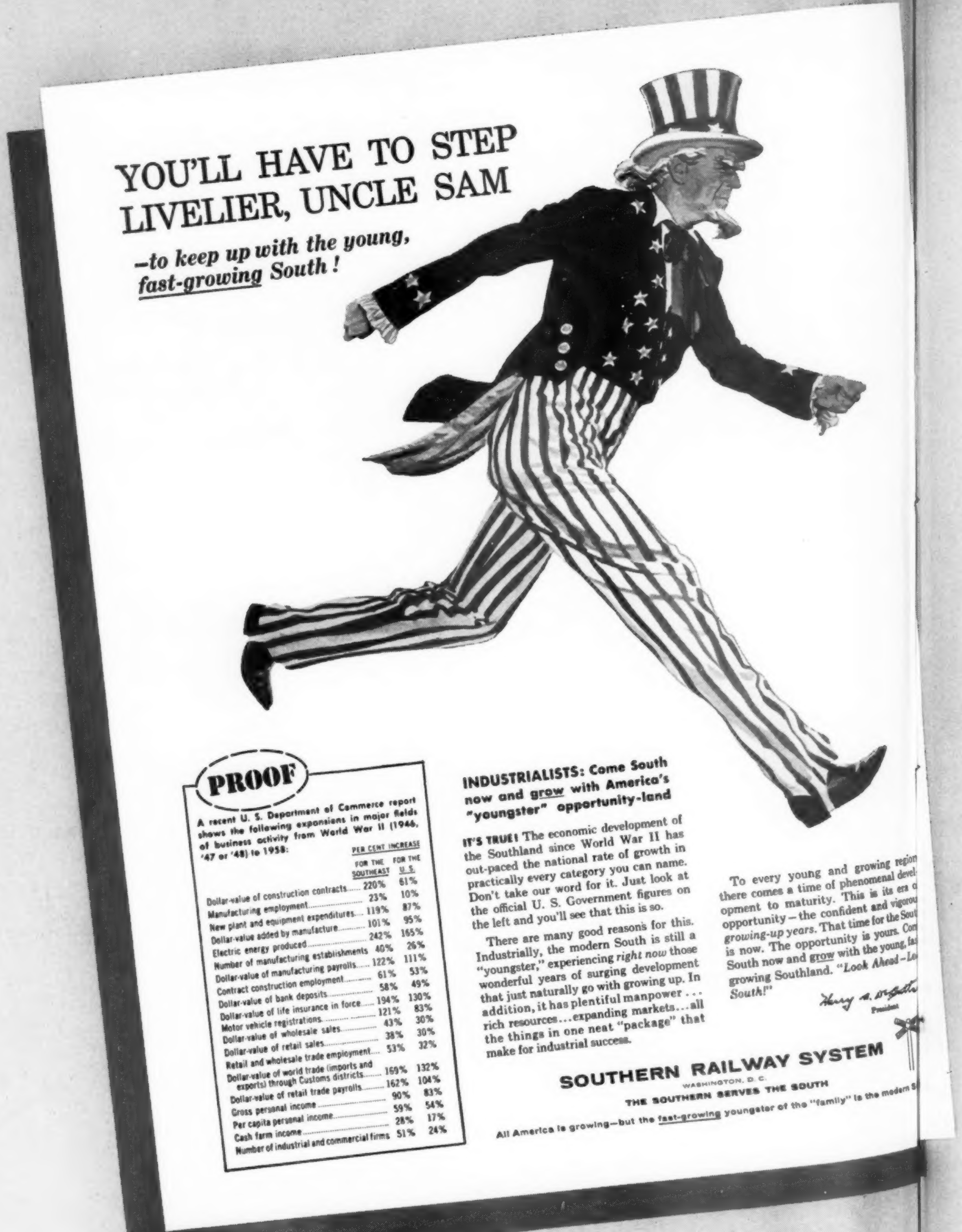

YOU'LL HAVE TO STEP LIVELIER, UNCLE SAM
–to keep up with the young, fast-growing South!
PROOF
A recent U. S. Department of Commerce report shows the following expansions in major fields of business activity from World War II (1946, '47 or '48) to 1958:
PER CENT INCREASE
FOR THE SOUTHEAST
FOR THE U.S.
Dollar-value of construction contracts 220% 61%
Manufacturing employment 23% 10%
New plant and equipment expenditures 119% 87%
Dollar-value added by manufacture 101% 95%
Electric energy produced 242% 165%
Number of manufacturing establishments 40% 26%
Dollar-value of manufacturing payrolls 122% 111%
Contract construction employment 61% 53%
Dollar-value of bank deposits 58% 49%
Dollar-value of life insurance in force 194% 130%
Motor vehicle registrations 121% 83%
Dollar-value of wholesale sales 43% 30%
Dollar-value of retail sales 38% 30%
Retail and wholesale trade employment 53% 32%
Dollar-value of world trade (imports and exports) through Customs districts 169% 132%
Dollar-value of retail trade payrolls 162% 104%
Gross personal income 90% 83%
Per capita personal income 59% 54%
Cash farm income 28% 17%
Number of industrial and commercial firms 51% 24%
INDUSTRIALISTS: Come South now and grow with America's "youngster" opportunity-land
IT'S TRUE! The economic development of the Southland since World War II has out-paced the national rate of growth in practically every category you can name. Don't take our word for it. Just look at the official U. S. Government figures on the left and you'll see that this is so.
There are many good reasons for this. Industrially, the modern South is still a "youngster," experiencing right now those wonderful years of surging development that just naturally go with growing up. In addition, it has plentiful manpower . . . rich resources . . . expanding markets . . . all the things in one neat "package" that make for industrial success.
To every young and growing region there comes a time of phenomenal devel-
opment to maturity. This is its era o
opportunity – the confident and vigorou
growing-up years. That time for the Sout
is now. The opportunity is yours. Com
South now and grow with the young, fa
growing Southland. "Look Ahead – Lo
South!"
President
SOUTHERN RAILWAY SYSTEM
WASHINGTON, D. C.
THE SOUTHERN SERVES THE SOUTH
All America is growing—but the fast-growing youngster of the "family" is the modern S

. NEW COMPANY . . . *new* because of new concepts in capacity, quality and ervice to meet missile age methods and demands. Here are examples:

To provide new standards of predictable performance and production cost-control for users of specialty steels:

*a revolutionary new steelmaking quality control system.**

To make more specialty steels available faster:

production capacity virtually doubled in the past two years.

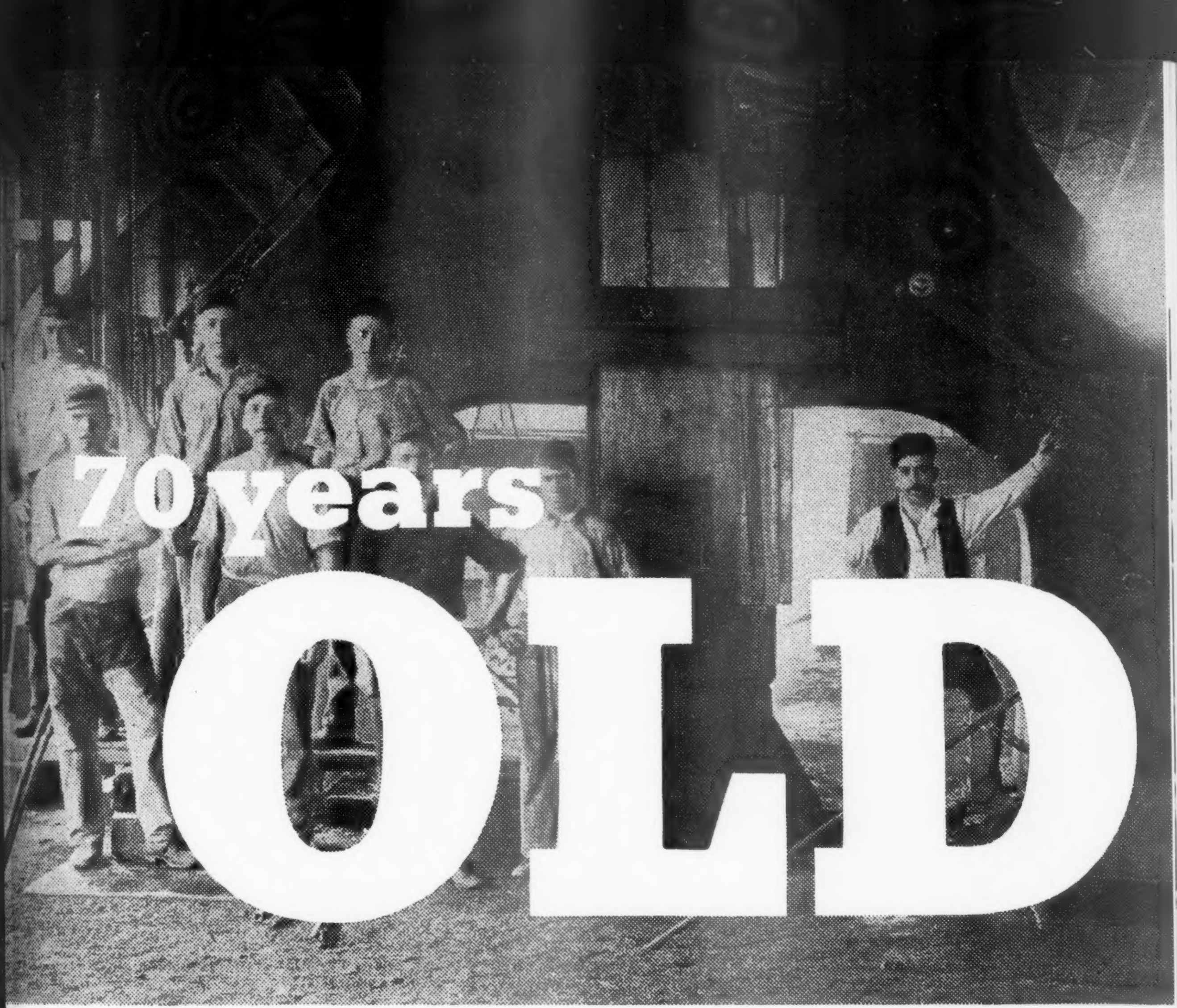
To improve what was already a leading nationwide warehousing and technical service facility:

even more local Carpenter Service Centers, fully staffed.

To give you the kind of products and service you need to survive against tomorrow's competition:

millions of new dollars invested in research, plant and product development that will help maintain Carpenter's 70-year-old leadership in specialty steels for years to come.

Carpenter MEL-TROL® steels . . . your only real assurance of *consistent* ore-to-surface uniformity in tools, dies and parts made from specialty steels. 'ours at no extra cost, only from Carpenter.



70 YEARS OLD . . . with an enviable tradition of craftsmanship and dedicated service that has earned Carpenter an outstanding record of specialty steel "firsts":

- (1898) America's only producer of nickel-steel, armor-piercing projectiles.
- (1906) the first basic automotive alloys.
- (1915) tool steels that pioneered the way to mass production.
- (1928) the world's first free-machining stainless.
- (1934) the Matched Set Method of selecting steels . . . and, more recently, new wonder alloys—Vega, Free-Cut Invar "36" . . . and the Mel-Trol Process to help American industry bring a better tomorrow closer.

tool and die steels
stainless steels
high temperature alloys
Carpenter steel
electronic, magnetic and electrical alloys
special-purpose steels
tubing and pipe
fine wire specialties

The Carpenter Steel Company, Main Office and Mills, Reading, Pa.

Alloy Tube Division, Union, N. J.
Webb Wire Division, New Brunswick, N. J.
Carpenter Steel of New England, Inc., Bridgeport, Conn.

BUSINESS OUTLOOK

BUSINESS WEEK

JAN. 23, 1960

A BUSINESS WEEK SERVICE

Business indicators generally are pointing up—production, employment, personal income. **Even housing** has recovered from that inexplicable October drop. All this should mean that things are going fine.

What, then, is the matter with the stock market? There is a question that has had a lot of people buzzing since the turn of the year.

Did stock prices **tumble on profit taking,** once the averages went through to new highs? In other words, is the market undergoing what Wall Street calls (sometimes a bit wishfully) a **technical correction?**

Or has this selling **reflected some deeper-seated fears?**

One thing most analysts will agree on is that **investors can hardly be worried about 1960 profits** in most industries.

However, some argue that part of this year's profit will be a windfall—gains on business carried forward due to the steel strike. There is a tendency to look on this as **an unrealistic measure of value.**

Then, too, there is concern about the state of business once depleted inventories are restored to normal working levels.

Inflation talk, for the moment, isn't too prevalent. As a result, **the inflation-hedgers aren't the stock buyers they once were.**

Tight money and budget balance are among the reasons, of course.

Facts like these work two ways: (1) They foster fear that ultimately **credit will put the brakes on business,** and (2) they make **bond yields look attractive** to investors who, worried about the stock market, would just as soon take to the sidelines for a while.

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Employment and payrolls are looking better than could be expected at this time of year. Even unemployment, though it remains a troublesome fact, seems to be rising less than it usually does after the holidays.

More people had jobs in December than in November, and **unemployment** showed a month-to-month decline of almost 100,000.

Neither movement, in itself, was large enough to cause much excitement. But **the significant thing** is that employment almost invariably goes down from November to December while unemployment rises.

And this contra-seasonal performance wasn't just due to the end of the steel strike; recovery forces were at work, too.

Looking only at **nonfarm employment,** the performance takes on added luster. Nonagricultural jobs were more numerous in December by nearly 850,000. Reaching almost 60.9-million, the total broke all records for December or any other month prior to 1959 by fully 1.3-million. And it topped 1959's August, the previous record holder, by an eyelash.

Unemployment will be up very substantially when the January report comes out. There always is a big jump after the holidays. But this year's looks to be **less than usual.**

One reason is sharply rising activity in the **auto industry.**

On an over-all basis, a clue is provided by new claims for unemployment compensation. These have been running well below a year ago.

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Bigger, nonfarm employment, higher wage rates, and longer work-weeks have **sent personal income kiting.**

The latest Dept. of Commerce estimate adds $2-billion, at an annual rate, to the earlier calculation for **November.** And the **December** figure, almost $4-billion higher at $390.7-billion, erased November's record almost before the calculators had stopped whirring.

Wage-and-salary payments in December reached an annual rate of $264-billion; this was $5-billion a year better than during the steel strike and **a year-to-year improvement of $17-billion.**

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Physical volume of production, which normally recovers a little less rapidly than gross national product and income rates, is among the few important business figures that failed to hit new highs at yearend (but that failure will be corrected when January results are announced).

The Federal Reserve Board's new index of production in December reached 165 (or 65% above the 1947-49 base period). **That was just one point shy of the previous high-water mark** posted in May and June.

Quite a few components of the Federal Reserve index did go to new highs in December (as you naturally would suspect by the narrowness of the miss for the combined index).

This was particularly true in the broad range of **consumer goods.**

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Homebuilders and their suppliers by now **must be completely up in the air about which way their industry is headed.**

In October, housing starts plummeted to an annual rate of 1,180,000. When November showed but scant improvement, the decline seemed too deep and lasting to be shrugged off as a byproduct of the steel strike.

Now we get the **December** figure: **up to a respectable 1.3-million.**

If these quick swings in the housing figures are confusing, here's a friendly word of warning: You ain't seen nothin' yet!

Now that it has full charge of the housing and construction statistics, **the Commerce Dept. has a full-dress revision in the works.** The results, you may be sure, will be startling.

Instead of 1,376,500 starts, 1959 may turn up with 1.6-million.

Why the big changes in the housing figures?

The Census Bureau ran a careful spot check in 1956. It found **fully 25% more homes had been built between 1950 and 1956** than had been counted.

Starts for the period averaged 1.5-million a year, not 1.2-million.

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BUSINESS WEEK

JANUARY 23, 1960

NUMBER 1586

KHRUSHCHEV tells Supreme Soviet of military reshuffle and "fantastic new weapon." Manpower cut merely means Russia is . . .

Going to U.S.-Style Defense

Coming shortly before summit talks, Khrushchev's boasts of military strength foreshadow tough line in negotiations.

Soviet Premier Nikita Khrushchev's dramatic speech to his parliament this week (picture) focused a hot spotlight on the balance of power between the two countries that dominate the world today.

This balance may largely determine the course of coming negotiations for a truce in the cold war.

And the fact that the speech coincided with the submission to Congress of Eisenhower's own budget sharpens the inevitable comparisons of U.S. vs. Soviet military might.

• **One-Third Cut**—Khrushchev announced plans for a one-third cut in his uniformed military forces—bringing them, by his count, down to 2.4-million over the next two years. This would bring his manpower (again using his numbers) a notch below the 2.5-million the U.S. is maintaining in uniform. (Actually, Khrushchev has some 400,-000 crack troops he didn't count—the uniformed "security police.")

Khrushchev also said he has a "fantastic new weapon" under development—but U.S. sources have no real idea of what it might be.

I. New Kind of Arms

Fantastic new weapon aside, top U.S. officials believe that the Russian troop reductions dramatize the changes in Soviet and U.S. military forces that have been under way in recent years.

In effect, Khrushchev is shaping his military power much as Eisenhower has been remaking our own military strength since 1953—trimming ground troops and other conventional units, building a nuclear striking power for ground troops, fleets, air forces, and long-range missiles.

• **Echo of Secy. Wilson**—Politically, Khrushchev has dealt a tremendous blow to some of the Administration's severest critics—particularly the Army generals and their supporters, who have rebelled against slashing our strength for conventional warfare while we pour billions into massive retaliation based on the hydrogen bomb.

In fact, Khrushchev's words could have been taken straight from the speeches of former Defense Secy. Charles E. Wilson, who bulled through Eisenhower's controversial New Look to get "more bang for a buck."

• **Type of War**—Khrushchev sees any future wars being fought much as Eisenhower and his aides have been saying: World War II-type warfare is over; instead, intercontinental nuclear weapons dominate, and huge armies to defend a nation's borders are outmoded.

Khrushchev said explicitly that the arms race is still on, that the U.S.S.R. is ahead in the missile race and intends to keep ahead until real agreement on disarmament is reached.

• **Tough for Negotiations**—Eisenhower's top defense officials agree with most of Khrushchev's own assessment of the arms race—and they insist that the Eisenhower budget enables the U.S. to negotiate effectively without any radical

increases in defense spending. They see the balance of power forcing an ever greater reliance on diplomacy to avert military clashes during the years ahead.

The tone and substance of Khrushchev's speech indicates that summit negotiations beginning in May will be long and hard. He will go in with powerful arms of every kind behind him, at the same time carrying a propaganda advantage from his announcement of a major cutback in his forces.

On major issues dividing East and West, Khrushchev is taking as tough a line as ever and will clearly bargain hard for all he can get. However, U.S. officials aren't completely brushing off his protestations of a desire to halt the arms race. The majority feel that the Soviets are in fact demobilizing surplus troops and will benefit considerably by the injection of a million or more productive workers into the civilian economy.

II. Foreign Policy Impact

Khrushchev argues that the shift in the relative balance of power in his favor has made the West's efforts to contain and isolate the Soviet bloc obsolete and a political accommodation with the Soviet Union essential. He will try to drive home this lesson with his upcoming missile tests in the Pacific.

At the same time, the announced cut in Soviet conventional forces may have a considerable impact on public opinion—particularly in neutralist-minded South Asia. It may dim somewhat Eisenhower's newly acquired luster as the champion of peace.

• **A Stick to Wave**—Khrushchev has provided himself with both a bigger stick and a bigger carrot for use at the conference tables. He hopes to present himself simultaneously as both stronger and more reasonable than the West.

In effect, he will be saying to Eisenhower and the other Western leaders:

"If you insist upon continuing the nuclear arms race, we will beat you. We have proved with our missiles, our Sputniks, our Luniks, our Pacific tests that we can do so. If you want peace, we're ready, and we have proved it by unilaterally cutting our armed forces."

His hope, of course, is that the Western peoples and their leaders will be sufficiently impressed by growing Soviet strength and sufficiently tempted by the possibility of disarmament to be willing to make concessions to him on Berlin or other issues. At the least, he obviously hopes that, by cutting his forces, he will make it harder for Western governments to maintain current levels of defense spending, and harder still to raise them.

• **Nuclear Stalemate**—The U.S. position, however, by Eisenhower's reading, is strong enough so that he can hold his own with Khrushchev at the summit meeting in May and during his scheduled visit to the Soviet Union in June.

The diplomatic balance of power, in other words, at this stage reflects clearly the nuclear stalemate. Neither side dares to use its military power directly to obtain political ends. In this situation, many U.S. officials believe there is a real possibility of negotiating limited agreements that would reduce the expenses and danger of maintaining and increasing nuclear military strength.

• **Basis for Agreement**—The key questions, of course—even granting a theoretical possibility of negotiating agreements—concern the terms upon which cold war issues might be settled.

Here Khrushchev's speech, if taken at face value, is discouraging. His position on Berlin is as tough as ever: The Western allies must sign peace treaties with both East and West Germany and make West Berlin a free city. If they won't, the Soviet Union will conclude a treaty with East Germany and turn control of Western access routes to Berlin over to the East Germans.

True, Khrushchev set no time limits on this, as he did originally at the start of the Berlin crisis in 1958. But he accompanied his remarks on Germany with a virulent attack on West German Chancellor Adenauer and his policies.

• **Nuclear Test Ban**—When it comes to the continuing negotiations for a ban on nuclear tests, Khrushchev in his speech carries water on both shoulders.

On the one hand, he concedes for the first time that it is technically impossible at this stage to guarantee detection of illicit underground tests with the sort of inspection system which the Russians have so far agreed to accept. But he added that an agreement, even without what the West considers to be adequate inspection provisions, would put a moral restraint on illegal testing until new technical means of inspection could be devised.

• **Maneuvering**—Most Soviet experts in Washington are not taking Khrushchev's stand on these issues at face value. They insist that it is natural for him to stake out the toughest bargaining position he can.

Basically, the feeling in Washington is that Khrushchev has invested too much of his prestige in seeking an accommodation with the West to heat up another diplomatic, much less a military, crisis at this time.

He may merely be stalling for time. Or it is possible that he really fears the economic and military implications of the arms race and wants some genuine progress toward arms control.

III. Effect on Defense

Despite Khrushchev's claim of Soviet military superiority, the new Secretary of Defense, Thomas S. Gates, says the "clear balance" of military power is "heavily in our favor."

Gates concedes that the Russians have more ICBMs than we have, but says Soviet accuracy will be "inferior."

• **Diversification**—The Administration places its reliance on a "diversified" arsenal of nuclear forces to offset the Soviet numerical advantage in missiles: some 1,800 Air Force jet bombers and 600 Navy carrier bombers (probably twice the Soviet air armada); squadrons of fighter bombers, IRBMs and smaller missiles poised close to the Iron Curtain; submarines and surface vessels armed with missiles, prowling the seas within range of Soviet targets.

No possible Soviet surprise attack, say Administration officials, could wipe out this tremendous retaliatory power.

• **Our Arsenal**—Behind the Administration's confident mood, this is how U.S. experts now see our military strength vis-a-vis the Russians:

In strategic weapons, we plan to deploy 270 Atlas and Titan liquid-fueled ICBMs (27 squadrons) over the next two or three years. This is a 30% larger force than was planned last year. A year ago, the Pentagon admitted that this ICBM force would be only one-third of what Soviet Russia was expected to have.

Now the Administration hopes that most, if not all, the Atlas and Titan launchers will be in place by the end of 1963, that the next-generation Minuteman solid-fueled ICBM will become operational by mid-1963, and that a fleet of Polaris missile submarines will be at sea by that time.

The Pentagon, in the meantime, still places great reliance on manned bombers. The Air Force now has 11 wings of B-52 bombers (45 planes per wing), plans to equip three more units in the next two years.

In seapower, Washington assumes "clear superiority" over-all. But U.S. strategists worry over Moscow's growing submarine force—about 700 operating by next year. A large number of these are capable of launching missiles at continental U.S. targets.

We have nine nuclear-powered subs at sea and 23 more under construction, plus three nuclear-powered surface ships being built. U.S. experts say the Russians are only now "achieving their first operational capability" with a nuclear sub.

In ground forces, the Russians have an overwhelming edge in both numbers and quality. Latest Pentagon estimates list Red Army strength at 2.5-million men—compared with 870,000 men in the U.S. army.

By and large, U.S. ground forces are still armed with World War II weapons. The Red Army, on the other hand, has an awesome arsenal of the latest weapons.

Economic Report Urges Hands Off

President tells Congress the economy will do fine if left to private enterprise, and growth will accelerate.

The outlook for economic growth is so promising that the best thing the government can do is stay out of the way and let the private sector roll, Pres. Eisenhower told Congress this week.

He didn't put it just that way, of course. But that is the message in the annual economic report of the President, required by the Employment Act of 1946.

This is Eisenhower's last word on economic philosophy. It was written by his Council of Economic Advisers, chiefly by Chmn. Raymond J. Saulnier. Council member Henry C. Wallich had a big hand in sections on the flow of foreign payments, and Karl Brandt in the sections devoted to agriculture.

• **Full of Optimism**—The theme of the report is economic growth, and the tone is one of strong optimism.

As the council views the future, 1960 looks good, 1961 could well be another year of boom, and the economy is capable of ending the decade with an annual gross national product of around $725-billion without undue strain. Growth at that pace implies a faster expansion than in recent years (page 52). The average since 1946, for example, is 3.2% a year. Inherent in the council's view is a rate of 4.2% for the 1960s.

Not all this is spelled out in detail. As Eisenhower's economic reports have done before—first those prepared by his first council chairman, Arthur F. Burns, and lately those by Saulnier—this one avoids quantitative goals. But the council comes fairly close this time.

It says the combination of a larger work force and productivity gains at merely the rate of recent decades would yield at the end of the decade an annual output close to half again as large as today's $500-billion. If the rate of productivity gain increases, then the economy will be even better off, and some of the report's key opening chapter is devoted to this theme.

• **Hands Off**—The government's chief role, as seen by Eisenhower and the council, is to adopt broad policies that will make it easier for the private sector to carry the load. It would be possible to lay out a program in which the government plays a more direct part. "But this is where we differ from the Democrats," one White House aide puts it.

Increases in government spending should be held down, for example, because "public outlays are made at the expense of private spending." On the other hand, a considerable part of the small increase the Administration calls for in fiscal 1961 "directly supports our economy's capacity for growth" and is therefore commended. Rising outlays for water development, research, education, health, highways, and air transportation are named.

The budget surplus sought by the Administration next fiscal year is praised as a powerful aid to growth in the expected economic climate. It will provide savings that will "help keep interest rates lower than otherwise and facilitate private investment."

The government could also aid growth by revising the present tax laws to stimulate investment, the report points out.

• **By Private Decision**—But for the most part, growth is left up to the private sector.

Private decision makers can speed up productivity, for example, by allocating more resources to investment and research. Wasteful labor practices can be eliminated. Wage increases can be held down so their national average will not exceed the national average of productivity increases. And price cuts "warranted by especially rapid productivity gains must be a normal and frequent feature of the economy."

Breakdowns in collective bargaining should not be allowed to impede growth as the steel strike did last year, the council warns. But it adds that attempts of the government to intervene with "legislation or controls" would be a grave mistake.

• **A Few Reservations**—These preachments are delivered against a background of satisfaction with the performance of the economy in 1959, with only minor qualifications.

One of these less satisfactory signs is the renewed upward movement of consumer prices. A period of stability that began in the spring of 1958 ended with May, 1959, and the consumer price index has been creeping up since.

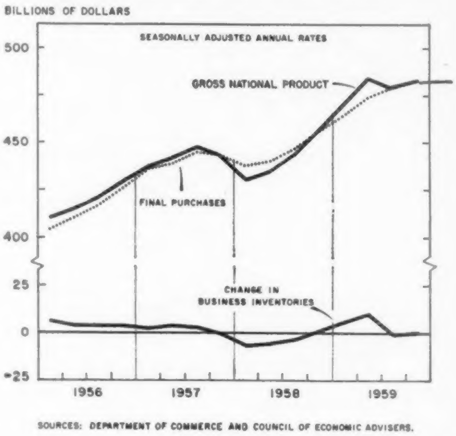
A decline in the net income of farmers last year is noted, but the council points out that it was still approximately equal to the average from the end of the Korean War through 1957.

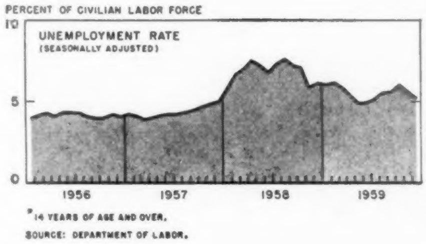
The rise in the international balance-of-payments deficit last year, which Treasury Secy. Robert B. Anderson has made the focal point of his economic thinking, is analyzed by the council with a moderately optimistic conclusion: The deficit should be less this year, due to a pickup in exports. Members of the council staff believe the deficit may be in a range from $2.5-billion to $3-billion this year, compared with about $3.7-billion last year. They feel that even this deficit is too high, however, and are supporting Anderson's drive to reduce it.

But, on the whole, what happened in 1959 is seen as a sound prelude to the growth that the council expects this year.

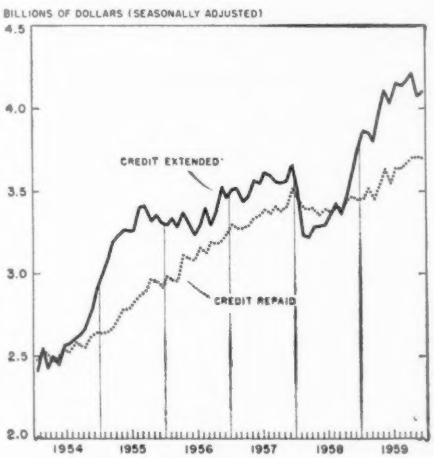
Gross National Product

Gross national product in 1959 reflected continued growth final purchases and marked shifts in inventory investment.





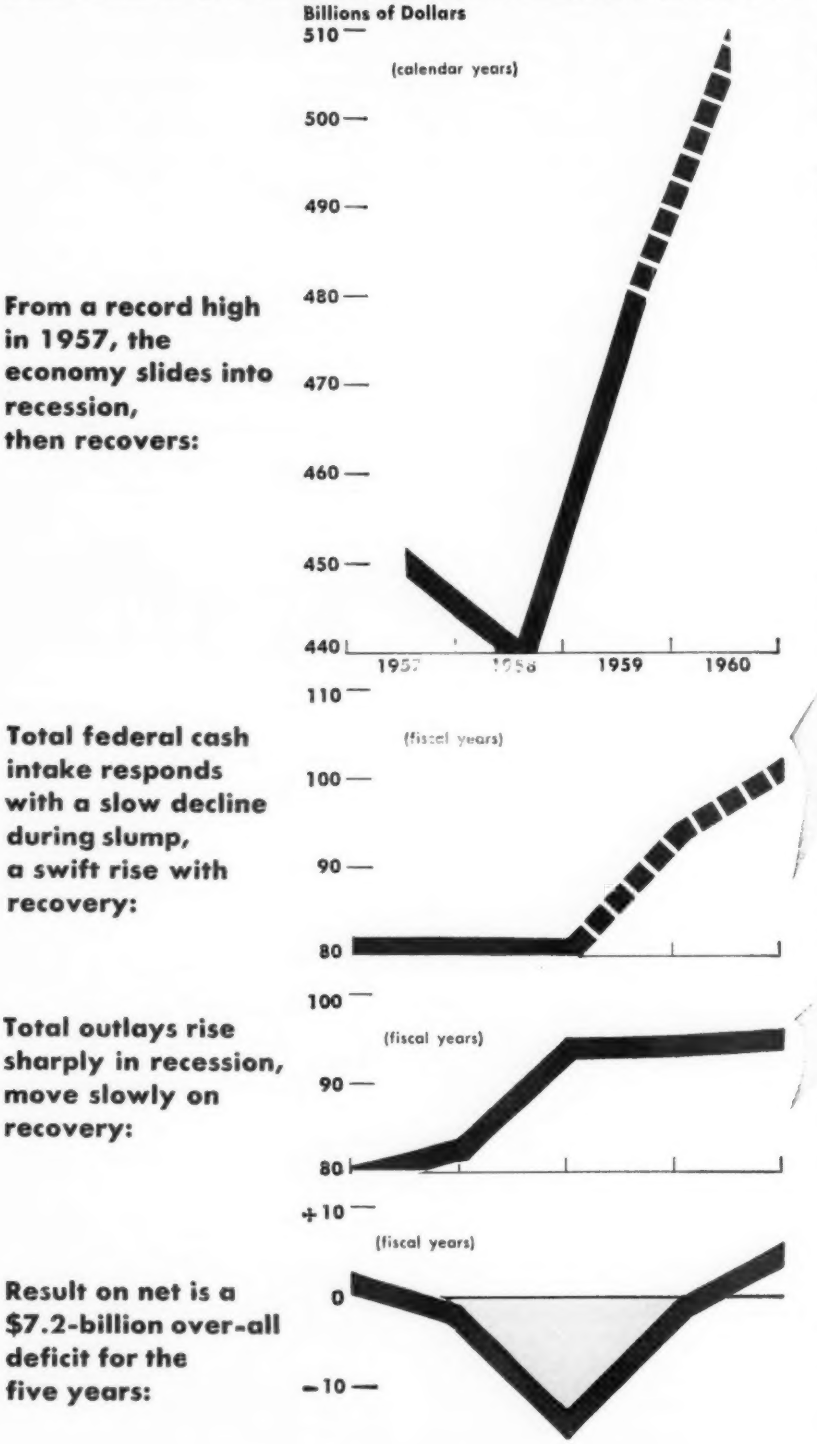
Consumer Instalment Credit



1959 PROGRESS is illustrated by these charts from the official report.

Why the Policymakers Can't

How the budget and the economy interact:



Pres. Eisenhower sent a federal budget to Congress this week that is more than just a spending plan for another fiscal year.

It also brings to a close a dramatic, fast-moving cycle in budget history—a period loaded with lessons, as yet undigested, for policymakers in government and business.

During the cycle, the economy as a whole rose to two record-smashing heights. And in the budget, the swings from surplus to deficit and back to surplus are unprecedented for both size and speed.

Already, there are hints of where the lessons point:

- In any given year, neither the President nor Congress, even if they are working in perfect harmony, have the final say on what happens to the budget. The decisive factors are the performance of the economy and irrevocable past commitments to spend.
- Tax receipts do not decline as sharply in a recession as many public officials have assumed. A drop in tax liabilities has been considered one of the more important of the automatic stabilizers and a key weapon against severe slumps. But total revenues stayed remarkably high during the recession of 1957-58.
- The traditional budget tends more and more to understate and even to distort what happens to the flow of money between the government and the public. It does not include payments to and from the social security and big highway trust funds. It also understates housing programs.

• **What Happened**—To detect what has been happening, it is necessary to use the figures in the charts on these pages. With the exception of those for interest, they are from what government experts call the consolidated cash accounts, or the cash budget. They have long been familiar to economists interested in the best possible measure of the budget's impact on the economy.

Both spending and receipts run larger on the cash basis.

In the regular budget, for example, Eisenhower foresees a $4.2-billion surplus in fiscal 1961. On the cash basis, the projected surplus is $5.9-billion.

In the regular budget, spending is planned to hit $79.8-billion. On the cash basis, however, spending is scheduled to rise to $96.3-billion.

Receipts show an even wider disparity. Eisenhower told Congress they will hit $84-billion if Congress adopts his recommended revenue measures. But on the same assumption, they shoot to $102.2-billion in the cash accounts. This means that for the first

n't Control the Budget Swings

time ever federal government receipts will pierce the $100-billion mark. But because it will be recorded in the cash accounts, the breakthrough will go by with relatively little comment.

I. Eisenhower's Plan

Eisenhower's strategy to close out the fiscal cycle is a simple one. For next year he wants Congress to produce about $1-billion additional revenue, extend some tax rates that will drop automatically July 1 unless Congress acts, then hold the spending rise to the modest one he sets out in the budget.

All this stems from a rapidly improving business outlook for the current year. A couple of months ago, when the steel strike was still knocking holes in corporate profits and federal receipts were suffering accordingly, administration officials warned of a possible deficit this year.

The improvement is so marked that tax-cut talk is being heard again. Budget Director Maurice B. Stans gave as his personal opinion that 1961 could be the time. Treasury Secy. Robert B. Anderson did not dispute the brighter picture, but refused to make any guesses as to timing.

• **Projections**—In the budget message this week, Eisenhower spelled out in detail why he thinks the current year will produce a small surplus, and lead to next year's larger one.

Here's how this fiscal year and fiscal 1961 now line up in the traditional budget:

	Fiscal Year 1960	*Fiscal Year 1961*
	(Billions of	*Dollars)*
Receipts	*$78.6*	*$84.0*
Expenditures ..	*78.4*	*79.8*
Surplus	*0.2*	*4.2*

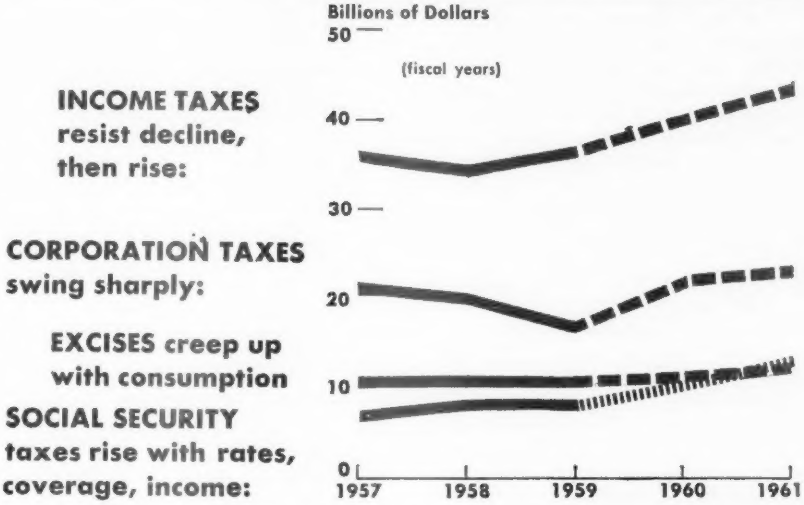
• **Skeptical**—Doubts are being raised about the accuracy of these projections—and for most of the usual reasons.

Fiscal 1960 still has almost six months to go, and fiscal 1961 will not be over until June 30, 1961. There is, first of all, the hazard of a sudden economic change, with the consequent effect on both revenues and spending.

When Eisenhower first presented a spending plan for 1959, for example, he projected a half-billion-dollar surplus. The recession was well under way at the time, but his advisers grievously misread its impact on the budget. Instead of a surplus, the record-smashing deficit of $12.4-billion resulted.

This time, economists almost unanimously agree the outlook is for a continued boom at least to the end of 1960. They would not argue strenuously with

The changes in receipts



And the changes in spending

	FISCAL YEARS (Billions of Dollars)				
	1957	1958	1959	1960 est.	1961 est.
Defense jumped, now levels off:	$43.4	$44.5	$46.6	$45.9	$45.9
FARM supports, take a big jump:	3.5	3.1	5.1	3.5	3.9
SOCIAL SECURITY payments rise steadily:	8.4	11.4	12.8	14.2	14.2
HIGHWAY trust fund outlays speeded in recession:	1.0	1.5	2.6	3.0	2.9
HOUSING swings a recession offset:	0.2	0.4	1.3	0.6	0.4
CIVIL AVIATION begins a long rise:	0.3	0.3	0.5	0.6	0.8
SPACE spending starts:	—	—	0.1	0.3	0.6
RESOURCE outlays, mostly water, creep up	1.3	1.5	1.7	1.8	1.9
INTEREST payments respond to rising rates	7.3	7.7	7.7	9.4	9.6

the Treasury Dept.'s own forecasts for the year: gross national product of $510-billion compared to $480-billion in 1959; corporate profits at $51-billion compared to $48-billion in 1959; and personal income at $402-billion, up from $380-billion last year.

But the budget as presented to Congress is never more than a working plan. What happens depends in part on whether Congress adopts the legislative proposals of the President. The Democratic majority in Congress was entering objections even before the official document was delivered.

II. How Firm?

More than $1-billion of revenue is in jeopardy.

Eisenhower has included an increase in postal rates to raise $554-million. Congress turned him down on this request last year and Democrats are predicting the answer will again be "No."

Eisenhower is also asking for a half-cent rise in the automobile gasoline tax, which would yield about $240-million dollars. Last year, Congress finally granted a 1¢ rise, and there is no sign that it is willing to increase it. Because the gasoline tax goes into the highway trust fund, this affects only the cash version of the budget.

The budget plan calls again for increased taxes on aviation fuel to yield $88-million—which Congress refused to approve last year.

A big chunk of revenue is involved in excises that must be extended at present rates to meet Eisenhower's target. Some $873-million depends on extending rates originally adopted as a Korean War measure, and the Administration may be able to hold the line on these. But $455-million depends on extending present rates on transportation and telephone tolls and this is a different matter. Congress voted in favor of cutting these excises only last year and set July 1 as the starting point.

Altogether, some $1.4-billion of revenue may be knocked out by refusal of Congress to go along with the Administration.

But there's a possible offset. Many forecasters are saying $525-billion is a more likely gross national product average this year than the $510-billion estimate used by the Administration. A faster pace of business expansion could supply enough revenue to redress the revenue picture.

• **Democrats Goal**—Democrats intend to overhaul the Eisenhower spending program as well as his revenue plans.

The heart of the Administration's program is to hold the defense spending total practically level—$41.0-billion for fiscal 1961 compared to $40.9-billion this year. But Sen. Richard B. Russell (D-Ga.), chairman of the Senate Armed Services Committee, expects an effort will be made to raise these figures (page 25).

Eisenhower surrendered on one point: He lifted a two-year ban against starting new water development projects. He approved 46 for the next fiscal year. But he did not budge in his opposition to increased federal aid for home building, highways, college housing, hospitals, pollution control, school construction, and other favorites of Democratic groups.

Democrats will try to increase some of these programs.

There is a likelihood that on balance the Democrats will not pierce the Eisenhower spending ceiling to any significant degree. What they add for arms, for example, may be deducted somewhere else, with foreign aid an obvious target. Eisenhower will use the veto weapon to stall any major increases. Democrats may even close up shop boasting—as they did last year—that they cut the President's budget.

• **Chances**—On the whole, the prospect of winding up the next year with surpluses of $4.2-billion and $5.9-billion in the two budget concepts appears about as good as such prospects ever are, giving the unavoidable risks.

Sen. Harry F. Byrd (D-Va.), chairman of the Senate Finance Committee, has doubts about the surplus. So has Speaker Sam Rayburn.

Surprisingly, National GOP Chmn. Thruston B. Morton has placed himself among the skeptics. Morton assumes that Congress will not grant the revenue increases, and that the surplus will therefore end up not higher than $2.8-billion.

These essentially are warnings from fiscal conservatives to the spenders in Congress not to get their hopes up and not to take into consideration the possibility of a faster-than-projected business rise.

III. Five Years of Frustration

Though the fiscal cycle now coming to a close began with one boom and closes with another, it was the recession that dominates the period.

After a couple of years of small surpluses, the recession generated three years of deficits in the cash budget, totaling $15.1-billion. Most of this was concentrated in the one year that still haunts Administration budget makers—$13.1-billion in 1959. The cumulative deficit more than wipes out a modest surplus in the first year of the cycle and the one projected for 1961, leaving a net deficit over the five years of $7.2-billion.

The comparable figures based on the regular budget show the same trend, though they produce a $2-billion larger deficit for the period. The better performance of the cash accounts is due to steady upward push of receipts for trust funds.

This means that in a period marked by two peaks of prosperity and a short, though sharp recession, federal financial operations lay substantially on the side of stimulating the economy. This is not what Eisenhower and his advisers were trying to do. They were trying to exert an over-all restrictive impact during all but a short time in the midst of the recession.

• **What Went Wrong**—A look at the big sources of revenue and the big spending programs (page 29) shows where things went contrary to plan.

In the crucial year of 1959, total receipts were unexpectedly stable. They dipped less than $1-billion under the year before. Altogether, from the 1957 peak to the recession low, the decline in receipts was only $2.7-billion. Corporation profits turn out to be the only really sensitive revenue source when recession strikes. The other sources hold up to a surprising degree.

But spending rose with swoosh—up $11.3-billion in the two years affected by the recession, and $8.8-billion in the single year 1959. The big and decisive change, then, was on the spending side. This surprises some fiscal analysts who have always assumed that a drop in receipts would be more important.

• **Reaction to Recession**—Some of the rise in spending was an intentional reaction to the recession. Congress speeded up the flow of funds from the highway trust fund, and Congress and the Administration collaborated to increase funds for housing. Congress also insisted on substantial temporary payments to sustain unemployment benefits. But altogether such recession-sparked increases came to only around $3-billion in 1959.

Even larger sums were dumped into the economy that year by a rise in arms spending ($2.1-billion) and in farm price support activities ($2.0-billion). Neither had any connection with the recession; they were the result of long-planned production schedules in the case of defense, and of bumper crops in the case of price supports.

The budget, in short, did not act during the recession the way it is supposed to in the textbooks. Receipts did not drop much at all, and most of the spending rise did not stem from the recession.

But with recovery, the budget is now performing along classic anti-cyclical lines. Receipts are mounting faster than spending and thus tend to curb exuberance in the economy. The flow of funds from the public to the federal government will rise $7.4-billion in fiscal 1961 in the cash accounts, if the Eisenhower projections are borne out. In contrast, spending will rise only $1-billion.

Is the Bull in Death Throes?

● The abrupt break in stock prices suggests to many in Wall Street that the 1958-59 bull market is ended and the bears are taking over.

● Investors seem to be shying away from equities, because of long-range doubts and higher yields elsewhere.

● The outlook: Probably prices will stabilize, but there won't be another dramatic upsurge.

The stock market's slow but steady decline this week exploded into the steepest one-day break since last September. Then, at midweek, the retreat resumed in a more orderly fashion. Over-all, the selloff that began just after the turn of the year has pulled the Dow-Jones industrial index down 40 points—from its peak of 685 on Jan. 5 to 643 this week.

The drop has brought a change of mood to Wall Street. Analysts who only a few weeks ago were complacent are now obviously shaken. They expected the rise in economic activity to spark a new climb in prices, particularly after the settlement in steel. Instead, steel peace triggered the current selloff. And today, for the first time since mid-1957, the bears are outnumbering the bulls.

This quick about-face is a direct reflection of the fall in prices. When stock prices rise, as they did in almost a straight line through 1958 and most of 1959, optimism about the future drowns out any skepticism. But when prices start falling, the pessimists cannot be silenced.

• **Death of the Bull?**—This week, Wall Street was buzzing with talk that the great bull market of 1958-59 is breathing its last. Few of those who hold this view openly predict a collapse. But many think the kind of decline now taking place—and the absence of a spirited rally—indicate clearly that the peak will not be surpassed again this year.

To be sure, most analysts expect the market to turn around sometime soon. And a majority still predicts that a new high will be reached in the first half. They blame the decline mainly on the vogue for taking profits early in the year. In this view, fears of a bear market are unlikely to last long at a time of increasing prosperity.

Normally, investors give short shrift to bearish talk. In late 1957, for example, the market steadied despite prophecies of a spiraling decline by a good many analysts. Last August, when the market began to dip, most investors shrugged it off as merely a pause before a new climb.

• **Not Buying**—This time, though, investors seem to be taking heed. Even those who express faith in the further climb of equity prices are wary about putting their money on the line. This failure of the optimists to back their predictions with actual purchases is one reason for the strength of bearish sentiment today.

The abstention from buying seems paradoxical, for the economic outlook has rarely been brighter. Almost every analyst sees record earnings ahead for the steel industry, for auto makers, for many capital goods lines. Similarly, there's general agreement that the railroads, hard hit by the steel strike in 1959, should show the highest profits in years.

• **Long-Run Doubts**—But while the immediate outlook is bright, analysts say investors—both individual and institutional—are looking farther ahead than they used to. There's much less confidence about economic prospects later in the year—or in 1961. There's also much less fear of inflation and thus less compulsion to buy common stocks as a hedge.

More than that, the yields now offered by fixed-income securities make them extremely attractive to any income-minded investor—particularly to bank-managed trust funds, to pension funds, and to college endowment funds. At the same time, it is clear that stocks offer very little income, and with their future prices in doubt, capital gains no longer seem automatic.

• **Corrections**—The fact is that investors no longer believe the theory that any stock with demonstrated growth can only go up in price. Instead, there's a recognition that concentrated buying of a few blue chips may have driven them to vulnerable price levels.

All during the earlier stages of the bull market, any price reduction immediately brought out new buying power. But now investors with funds available are acting cagily. Some are willing to put their funds into stocks, but they are holding back to see if further drops are coming. This hesitation, together with sales by investors anxious to pare their positions, is causing a real erosion in prices.

• **No Surprise**—Samuel Lee Stedman of Carl M. Loeb, Rhodes & Co., who is one of Wall Street's most successful analysts specializing in growth stocks, reports that he has not been surprised by the drop. He expects the market may decline even more. In his opinion, the decline has been stimulated by investors awareness of the satisfactory return now available on bonds. This has encouraged the "yield-conscious" investor—the forgotten man in the bull market—to switch out of stocks.

Stedman reports a "definite unease" among institutions that have been in favor of investing in what he calls the "standard over-accepted" stocks. He says they are now learning that buying growth has its "negative aspects," that growth is by no means automatic. But he looks on this reevaluation as a healthy development that can help prevent a real crash.

• **Typical Caution**—Edmund W. Tabell of Walston & Co., a leading technical chartist, has revised his own views downward. He now thinks the market will have trouble hitting 700 on the Dow-Jones industrial average. Tabell sees few signs of a genuine rise and suggests "a very cautious attitude towards the market." Specifically, he prescribes "lightening" commitments in any upturn. This view is now shared by many Wall Street analysts.

Among them is Walter Gutman of Shields & Co., who thinks the market has become extremely vulnerable and investors would be wise to weed out their portfolios. Gutman says that much of the optimistic outlook for business has already been discounted by investors. The stock market's course from here on will be irregular, he feels. In fact, Gutman thinks that if one area could produce spectacular results, it would be the bond market, not the stock market.

But there is no sign yet of a general run-for-the-hills mood, and a majority of forecasters thinks that the next change in market sentiment will probably be for the better, rather than for the worse. They see the drop as typical of the corrections that occur with increasing frequency in an aging bull market. And though they don't expect a new upsurge of the kind that was common in 1958 and 1959, they do look for the market to stabilize. Said one of these analysts this week: "People like bargains. If stocks become cheap, there will be a new buying wave."

U.S. Pushes New Atlantic Body to

In another 18 months or so the U.S. will join with Canada and Western Europe in setting up a 20-nation economic organization that will bridge the Atlantic—attempting to coordinate the trade and aid policies of the industrial nations and maintain economic growth and stability throughout the Atlantic community.

The new organization, paralleling NATO in its membership, will be a revamped and broadened version of the Organization for European Economic Cooperation (OEEC), the body that was set up in 1947 to handle the Marshall Plan. An important aim in forming the new organization is to avert a trade war in Europe that could damage U.S. economic interests, especially the large U.S. export trade in Europe (map).

• **U.S. Initiative**—That's the essence of the commitment made by the Eisenhower Administration at a special economic conference in Paris last week. And there's no reason to think that the next Administration, or the next Congress, will draw back from this commitment. The European nations—now badly split into two rival trading blocs—can be expected to go along with the idea.

It was the U.S. that took the initiative in proposing this new venture in Atlantic economic cooperation. But the U.S. goal this time is very different from what it was in 1947 when we helped to set up OEEC. That was a venture in getting Europe back on its feet—and it succeeded so well that the European nations now are fully competitive with the U.S.

Today, the U.S. is primarily concerned with protecting its own interests and with maintaining economic cooperation in the non-Communist world generally.

• **Europe's Cleavage**—The decision to establish a new transatlantic organization came after Under Secy. of State. Douglas Dillon returned from a trip to Western Europe in December. At that time Dillon found a sullen hostility between the close-knit six-nation European Economic Community, or Common Market, and the much looser seven-nation European Free Trade Assn. that has been formed on the fringes of the common market.

This hostility already threatens the unity of NATO—and, if it developed into a real trade war, U.S. economic and trade interests would be hurt as well.

Dillon also found a lack of urgency about mobilizing European financial resources to supplement U.S. aid programs in the underdeveloped countries. Given the worrisome U.S. balance of payments problem, the prospect on both counts looked far from pleasant to Dillon.

• **Breaking the Jam**—To break the log jams on trade and aid, the Administration decided early in January that it would have to move once more right into the middle of European economic affairs, instead of standing on the sidelines as it has for the past two years. Pres. Eisenhower and Treasury Secy. Robert Anderson agreed with Dillon on this. Anderson wanted to be sure, however, that Dillon didn't take a blank check for U.S. aid with him to Paris.

There was agreement, too, that in an election year, the U.S. government should not try to rush through a complicated reorganization of OEEC, and then try to get Congress to approve U.S. membership. So at the Paris conference, Dillon proposed:

• A study of ways to set up a 20-nation economic organization that would take over from OEEC. It was agreed that this study should be carried out by a working party of four members, one each from the U.S., Britain, France, and Greece. This group is to report back to the 20 potential members of the new organization.

• A new effort to close the gap between the Inner Six and Outer Seven. This problem was turned over to a 20-nation committee, which is expected to meet in another month or so. A rep-

to Avert Trade War

resentative from GATT, the worldwide General Agreement on Tariffs and Trade, will sit in.

• A committee of eight nations (including the U.S., Britain, France, West Germany, and other nations capable of exporting capital) to study ways of coordinating aid to the underdeveloped countries. This group will meet in Washington within a month.

Some U.S. officials believe that it may not be possible for these interim groups to make any real progress on the concrete problems of trade and aid until the new permanent organization is established some time next year.

• **U.S. Ideas**—When it comes to the new organization itself, the Administration has some fairly firm notions. One is that the U.S. cannot become too closely identified with an Atlantic economic organization, any more than we can trust our military security entirely to NATO. In fact, Washington may insist that the new 20-nation body simply be called the Organization for Economic Cooperation (OEC), rather than the Organization for Atlantic Economic Cooperation (OAEC)—a label used by some groups advocating a U.S.-European economic body.

For one thing, Washington wants to see Japan made an associate member. For another, it doesn't want to offend Latin America.

Whatever the name, this new effort looks like a logical extension of the various forms of international economic cooperation that have been set up since the war—the International Monetary Fund, the World Bank, GATT, and OEEC itself. If the U.S. weren't willing to take this step, there would be a real danger that Western nations might return to the beggar-my-neighbor policies of prewar days.

It's still true, though, that Washington has no clear idea of how the trade squabble in Europe can be ended and U.S. trade interests protected. In general, our goal is to keep discrimination against U.S. goods at a minimum in each of the two trading blocs. The trouble is that freer trade within either bloc—and that's the goal of each—automatically means some discrimination against U.S. exports.

• **Leverage**—However, by getting into the middle of the new discussions that are to start on problems of the Six and Seven, the U.S. should be able to prevent any special deals between the two blocs on an industry by industry basis—deals that would hurt U.S. exports. For example, there has been talk in Europe about bridging the gap between the Six and the Seven by each opening up the market of the other for autos and paper products.

Washington will also have an extra leverage in getting the common tariff of the Six, collected from outsiders, brought below planned levels.

In short, the provisional 20-nation trade policy committee is expected to provide a framework within which hostility between Europe's two trading blocs can be moderated, pending the establishment of the OEC. It is hoped that U.S. participation will prevent hostility between the two blocs from leading to a trade war that would hurt the interests of all Free World nations as well as the U.S.

Put another way, Dillon hopes to keep Europe's trade negotiations as close as possible to the rules and the spirit of GATT. This in itself will make a more favorable climate when the U.S. gets into the upcoming general round of tariff negotiations under GATT.

• **Coordinating Aid**—If and when the OEC actually gets going, its role in coordinating aid policies could be important. For example, it would provide a forum for discussing whether certain countries were contributing a fair share; and to what extent and under what circumstances aid should be tied to purchases in the donor country. It could take up loan terms—how soft they should be, what interest rates charged, duration, and similar points.

On occasion, as Dillon suggested in Paris, the organization might be instrumental in arranging for member countries to form consortiums—with or without the good offices of the World Bank—to aid underdeveloped lands.

As some U.S. officials see things, OEC might eventually become a useful mechanism for adjusting the aid burdens of member countries to short-term swings in their balances of payment. At least, if one country had balance of payment difficulties, it could hope to arrange for other creditor members to pay out more aid while it held even—thus helping to right its balance of payments.

The objective here would be to use the cooperative mechanism of the OEC to give countries confidence to embark upon aid programs when they were prosperous, in the knowledge that if they ran into difficulties they would get understanding and assistance from other members.

In addition, it is expected that OEC will follow in the footsteps of OEEC by providing for periodic consultation between member governments on how each is handling the problem of achieving economic growth without inflation. Although there is some opposition in Washington to having the U.S. commit itself to this kind of international exercise, top Administration officials feel that we probably stand to gain by it. In any case, it looks to them like a small price to pay for the kind of cooperation we are asking from the Europeans on trade and aid.

TV Gets a Pat—and a New Clout

● New York viewers heap bouquets on threatened Play of Week, and Jersey Standard Oil comes to its rescue.

● Other companies join in moves for better quality programing in prime hours—with some cost adjustments.

● FTC, meanwhile, cracks down with new charges of misrepresentation of products in TV commercials.

Television got a pat on the head from the public last week—and a swat where it hurts from the government.

Praise came for rescuing the critically acclaimed but undersponsored Play of the Week from an untimely death as another failure in TV's series of experiments in quality programing.

Blame came from the Federal Trade Commission, which charged four advertisers, their agencies, and one agency executive with misrepresenting products in their TV commercials.

• **Viewers' Revolt**—Play of the Week has been stirring New York's tough TV critics to rhapsodic reviews all season. Presented over a New York independent station, WNTA, it offers viewers seven showings each week of a top-flight dramatic show. A different play is selected every week and recorded on tape.

Play of the Week has aired some prize vehicles: Chekhov's Cherry Orchard, Anouilh's Waltz of the Toreadors, Robinson Jeffers' Medea. It has starred some luminous names: Helen Hayes, Judith Anderson, Hume Cronyn (all of whom worked for minimum rates). Play of the Week had everything, critics agreed, except adequate sponsorship.

The program was bringing in about $20,000 a week; to stay on the air, the figure should have been almost double that. It suffered from low ratings, which meant a high cost per 1,000 viewers; and this meant few sponsors. WNTA reluctantly announced it would have to cancel the show by Jan. 31.

Several New York newspapers editorially lamented its prospective demise. The New York Times urged viewers to conduct a write-in campaign to save it. WNTA was deluged with some 30,000 letters—the sign, at the least, of a devoted audience.

• **Rescue Operation**—WNTA analyzed the correspondence, found some good ammunition for the contention that behind its ratings is an above-average audience. Of the total, 41% called Play of the Week "one of the few shows we watch"; 32% sent money; 24% pledged to buy sponsors' products.

Standard Oil Co. (New Jersey) and its agency, Ogilvy, Benson & Mather, Inc., saw an opportunity. They bought full sponsorship of the show for the next 13 weeks at $40,000 a week.

Jersey Standard's Pres. M. J. Rathbone made clear that the company won't tinker with the shows. "This is an audience which Jersey Standard wishes to reach with institutional messages. . . . Our contract specifies that we will have no voice in the subject matter, script, production techniques, or cast of each week's play." The statement gains significance in the light of the show's frank treatment of such themes as impotence and infidelity.

• **Parallel Move**—Jersey Standard's move may herald other steps toward freeing TV programing from the lowest common denominator approach. This week it was learned that American Machine & Foundry Co. will sponsor a series prepared by CBS and the Massachusetts Institute of Technology and dealing with scientific frontiers.

In the past, this type of show would have been confined to Sunday afternoon; but AMF's agency, Cunningham & Walsh, Inc., confirms that the contract stipulates prime evening time. AMF would accept the kind of rating that would jeopardize a run-of-the-mill evening show. AMF considers this type of show to be the coming trend in programing, and wants to be in the vanguard.

• **Adjustments**—A ground-breaker in prime evening time public service programing—B. F. Goodrich Co., which co-sponsors CBS Reports, a show presenting controversial topics—appears satisfied with its experiment. So far it has received a Nielsen rating of about 16 (against 23 for the average evening show). But since Goodrich pays CBS about half the normal price, it is getting unusually favorable cost per thousand. AMF will pay regular time rate; but it is thought to be getting a break on production charges for its show.

Goodrich Pres. J. Ward Keener thinks more public service programing in prime hours is inevitable, with networks adjusting charges to actual audience size, and to positioning. He says: "I expect we will pay less for an adjacency to TV's editorial page than for an adjacency to its sports page."

• **Skeptic**—One astute agency executive, however, thinks "this apparent upsurge in public service programing will last just as long as the public remembers the quiz scandals." He credits Jersey Standard with a public relations coup—"the front page story they got in the Times alone was worth the price." He claims most companies, and networks, consider better programing public relations, not advertising.

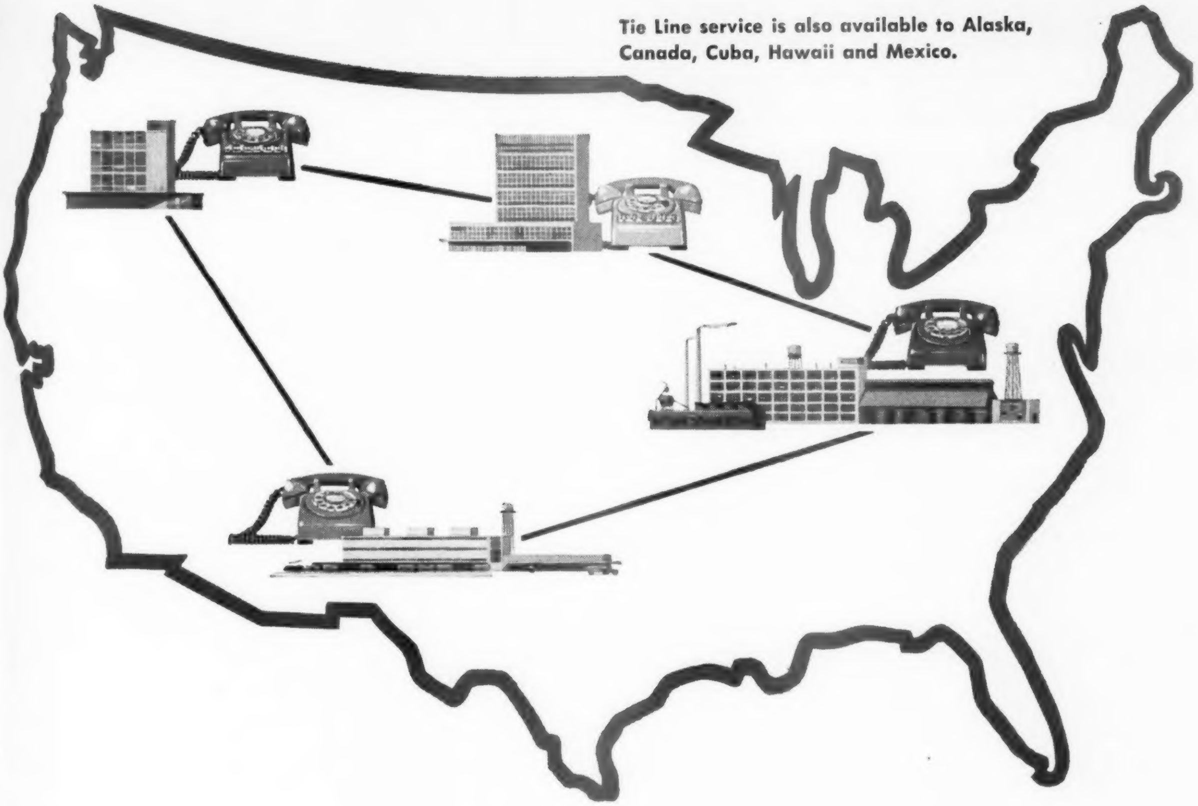
• **Concern**—But if Madison Avenue questions the uplift in programs, it is visibly concerned about the cleanup in commercials. It's not that it particularly fears FTC's legal powers—a cease-and-desist order takes long legal fencing.

What disturbs Madison Avenue is that the government seems intent on turning advertising's own tools of communication against it. In recent complaints, FTC has taken to naming the agencies involved as well as the manufacturers—and it seems to be paying off. At least two advertisers named have withdrawn the commercials in question.

• **Cases**—FTC's current batch of complaints involves Aluminum Co. of America, Standard Brands, Inc., Lever Bros. Co., Colgate-Palmolive Co., and the three agencies which represent them: Ted Bates & Co., Foote, Cone & Belding, Inc., and Ketchum, MacLeod & Grove, Inc. The gist of the charges is misrepresentation of the companies' products by claiming to show one thing while actually showing something else—a charge that mostly boils down to the props used in commercials. For example, Colgate claims its shaving cream makes it possible to shave the sand off sandpaper—but what it actually shows is shaving sand off Plexiglas (it says the sandpaper test was bona fide but doesn't show up well on TV).

Standard Brands and Lever Bros. claim they originally showed the questioned commercials to FTC field men, who found nothing objectionable. One of the agencies complains that as recently as December the FTC announced that it approved the use of artifice in TV commercials as long as this didn't misrepresent the product.

• **Battle of Schools**—If FTC's campaign is effective, it may help resolve the battle between the hard sell and brand image schools of advertising. Three out of five TFC complaints naming agencies have singled out Ted Bates & Co., Inc., known as the very citadel of the hard sell school. These moves against Bates—which has always prided itself on subjecting its ads to rigorous tests to prove they are "FTCable," or acceptable to the FTC—are the best index of the FTC's new activist attitude.



"Tie Line" telephone service helps tie your locations together...

Gives you unlimited calls for a flat monthly rate

Tie Line service is a direct telephone line between your business locations. It is yours full time. You pay a flat monthly charge instead of paying by the call.

Tie Lines are normally used for fast, personal, two-way conversations between any of the points on the line. They are valuable assets for every business with two or more locations—for they help speed the handling of orders and operations, control inventories, keep everybody informed. All of these things save money.

Tie Lines have alternate uses. By adding the proper equipment, you can send teletypewriter messages, transmit pictures, charts and data, read meters at a distance, throw switches, and do other specialized jobs.

GET FULL DETAILS—FREE

Just call your Bell Telephone business office and ask about Tie Line service. No obligation.

BELL TELEPHONE SYSTEM

Cracking Down on Air Safety

Even before this winter's series of crashes got the year off to a bad start, FAA Administrator Quesada was stirring a hornet's nest with his tough new rules.

From Washington's busy, rain-swept National Airport, a Capital Airlines Viscount rose last Monday night and headed toward Norfolk, Va., on the last leg of a flight from Chicago.

It was 9:40 p.m. at 600 feet, the lights of Washington disappeared in a fog that had been low enough an hour earlier to shroud the dome of the Capitol building itself. An hour and 40 minutes after takeoff, the Viscount crashed and burned in a marsh near Holdcroft, Va., killing all 50 of its passengers and crew.

• **Black Marks**—Nothing could have emphasized more the plight of aviation:

• Although airline service is one of the safest forms of public transportation (the passenger fatality rate is 0.68 per 100-million passenger-miles, compared with about 2.6 for automobiles), airline accidents and fatalities are at a peak. Increasing numbers of emergencies and minor accidents get little or no public notice. Last year, 294 people died in 66 accidents on domestic and international routes. Both figures are the highest since 1938. This year, the Viscount crash and the crash of a National Airlines DC-6B two weeks ago have already taken 84 lives.

• Even worse are the relatively unpublicized crackups and fatalities of corporate, executive, and personal aircraft. Out of 4,800 accidents last year, 432 accounted for 778 fatalities.

• **No Easy Pattern**—What perplexes most investigators of the crashes is the fact that there is no pattern that can be applied to prevention of future mishaps. No single type of aircraft, for example, is more likely to fall than any other. Nor does it make any difference whether the airline is a big trunk, a small connecting line, or a non-scheduled carrier.

• **Dissension in Ranks**—The growing concern over air crashes comes at a time when aviation is deep in a strange brawl over safety that makes little sense to outsiders. The reason for the brawling is the campaign of Elwood R. (Pete) Quesada, tough administrator of the Federal Aviation Agency, to jack up standards of maintenance and pilot discipline.

Last week, in testimony before Sen. A. S. (Mike) Monroney's Aviation subcommittee concerning possible revision of the act that set up FAA, Quesada said that:

• There was obvious laxness in airline operations.

• FAA is moving quickly, if not tactfully, to raise standards.

• It will need a lot of shoving, pushing, and pulling to make an industry comply with military-type regulations, after long years in which as many as 40 aviation-connected groups have had their say before any rule was passed.

• **Horrible Example**—Quesada described four cases out of 60 compiled by FAA inspectors as "just a few examples of laxness, complacency, and even defiance."

Quesada's most damaging case was one involving an accident that cost 15 lives. Concealing the identity of the airline involved, he told the subcommittee that FAA inspectors discovered the captain of the airliner had not taken a medical examination for 3½ years and was two months overdue on a required proficiency check, thus was legally unqualified to fly. Moreover, the pilot had falsified company records to conceal these facts.

• **New Requirements**—Quesada unrolled a long list of plans for better control of aviation. Beginning May 1, for example, FAA will require that crew training programs of the airlines be submitted for approval. Co-pilot training requirements are being raised nearly to those of pilots. Higher standards are being set for both private and commercial pilots.

Already, U. S. carriers are required to limit the consumption of alcohol by passengers in flight and are on notice to install radar on all commercial aircraft by Jan. 1, 1962.

Because FAA and Quesada are convinced that men over 60 are more subject to severe ailments, such as heart attacks, FAA is forbidding pilots above that age to fly commercially.

• **Airline Reaction**—The airliners generally are content to live under the rules being imposed on them by Quesada, though they complain there isn't enough discussion before a new rule is clapped on.

At last week's hearings, S. G. Tipton, president of the Air Transport Assn., questioned if FAA does enough "spadework" before a safety regulation is issued.

• **Pilots Gripe**—It is the pilots themselves, though, who have labeled the zeal of Quesada for air safety as harassment of the pilots. They say FAA inspectors are not qualified to check their work, are surly and rude.

A pilot in Miami tells of this experience with an FAA inspector: The inspector boarded a National Airlines 707 jet that was taking off from Miami with 125 passengers when an engine flamed out just as the jet was shooting down the runway. Instead of trying to halt the takeoff, the pilot decided to take it up.

After the plane was in the air, the pilot got the engine going, then turned to the FAA inspector to ask whether the plane could have been stopped on the ground without a crackup. The inspector agreed that the pilot had made the right decision. Yet, the next day, on orders from FAA, National Airlines grounded the pilot until he had completed further "engine out" training.

Pilots also complain that Quesada, whom they privately refer to as "Fidel," is too militant, that he and his FAA are bearing down on the pilots to make up for deficiencies in the tools that pilots have to work with, such as poor approach and runway lighting at airports.

• **Agreement on Need**—The strange part of the war between Quesada and the pilots, whose voice is the Air Line Pilots Assn., is that everyone is for safety.

One possible reason for the feuding is that airline pilots have always sought more voice in what goes on in the air. Always outspoken in their opinions, they are being out-spoken by a regulatory agency that shows a vigor that is unique in the history of air regulation. Only a year old, FAA has already found 3,800 violations, twice the number found in 1958. With Quesada, the airline pilots have less to say in an industry in which everyone has had a say.

• **Quesada's Plans**—Backed by broad powers under the Federal Aviation Act, Quesada is serving up a series of plans that will affect nearly every segment of aviation:

• Safety rules to be issued will be devised by FAA alone. Says Quesada: "No special-interest group can be permitted to hold the pen that writes the rule."

• Maintenance of airplanes will come in for a harder look than in the past. Already one major carrier has reorganized its maintenance program on request of FAA.

• Regulations governing qualifications for flight engineer licenses will soon be tightened.

• Being upgraded, too, are the qualifying rules governing mechanics, minimum standards of inspection, servicing, and aircraft overhauling.

• Changes in airworthiness regulations are also being considered.

• Business flying and air taxi services are coming in for some changes, too. The prospect is for more inspection, more training, and more surveillance, especially to give private flyers "an ability to cope with in-flight emergencies."

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In Business

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U.S. Steel Plays Price Cop, Cuts Warehouse Prices in St. Louis

U. S. Steel played price policeman this week when its Supply Div. cut the warehouse price of four high-volume items in the St. Louis Market "to meet competitive prices." At midweek, it was purely a local situation; John Morava, president of the Supply Div., said it would affect no other warehouse locations.

Whether it would remain local seem problematic. One trade expert said he "hoped" it would not spread, but a St. Louis source said the cuts might not be the last. And an official of J. T. Ryerson, the largest domestic warehouse chain, said, "There has been price sniping all over the country for more than a year, even during the strike."

He expressed surprise at the Supply Div. move, which cut hot finished bars and plates $5.40 per ton, sheet $5.60, and structurals $7.20.

U. S. Steel investigated for six weeks before acting. Apparently it found price skirmishing "in the fringe area between mill prices and established schedules." **That's a formal way of saying that warehousers who felt pinched were trading away things as extras and freight charges.**

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Drug Companies Vie for Approval Of Live Virus Polio Vaccine

With mass testing of live virus polio vaccine getting under way, the race among drug companies to be the first to market a U. S.-approved vaccine has started in earnest.

One-dose live vaccines have been tested successfully abroad, but the Public Health Service has refused to license commercial production without strict tests. Within a few months, test results should start pouring into Public Health's Washington headquarters.

One batch will come from the National Foundation, which is testing 250 volunteers in Houston with Sabin vaccine produced by Merck & Co. The foundation also plans tests soon in New Haven and Cleveland.

Meanwhile, Lederle Laboratories is getting set for a much broader test of its own Cox vaccine on 520,000 Dade County (Fla.) residents under 40—the biggest test sampling of a new vaccine ever attempted in one place in the U.S.

• • •

Steel's '59 Spending Close to a Billion But Adds Only a Mite to Capacity

U.S. steelmakers spent almost their customary billion dollars on improvement and expansion last year—despite the interference of the four-month strike. But all it added to ingot capacity was a measly 947,300 tons, bringing the nation's total to 148,570,970 tons at yearend.

Most of the addition came directly from oxygen practice; for the year, there were 14 fewer open hearth furnaces in operation, and 10 more electric furnaces. Thus, Armco added 400,000 tons of capacity, with no change in the number of its furnaces.

Incidentally, this boost moved Armco from eighth place to sixth in the industry, ahead of Youngstown Sheet & Tube (seventh) and Inland. In the second division, Detroit Steel dropped from 15th to 18th with the junking of five old open hearths. Granite City, Crucible, and Acme each moved up a notch.

For 1960, no staggering amount of new capacity is expected. Despite the certainty of very high production and increased capital spending, capacity will remain well ahead of demand, with the emphasis heavily on cost-saving equipment.

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Companies Stake $15-Million on Process To Extract Oil From Athabasca Sands

Four U.S. and Canadian oil companies last week announced they are spending $15-million in an attempt to prove out a commercially feasible way to tap the oil-rich Athabasca sands of northern Alberta.

The combine includes Imperial Oil, Ltd., a subsidiary of Standard Oil Co. (New Jersey); Cities Service Athabasca, Inc., a subsidiary of Cities Service Co.; Richfield Oil Corp., and Royalite Oil Co., Ltd.

The process under study involves strip-mining and sand extracting the oil-like bitumen. The bitumen is then converted into an oil-water mix and pumped to a plant for processing into crude oil.

The big investment hints the group may be able to produce crude at the competitive cost of $1.40 to $1.50 per bbl. If so, the new process might well open up the estimated 40-billion bbl. of oil reserves in the Athabasca sands—more than the U.S. total.

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U.S., Two Companies to Start Work On First Ocean-Going Hydrofoil Ship

The Maritime Administration and two private companies—General Electric and Dynamic Developments, Inc., a Grumman affiliate—have ganged up on a $3.5-million project to build the first ocean-going hydrofoil ship.

Their immediate goal is a 100-ft. craft that will carry passengers at speeds of 60-80 knots with a range of 700 miles. Present hydrofoils are for use only in sheltered waters. The new craft, due for completion in 18 months, could cross the Atlantic by refueling at Halifax and Iceland. It will belong to the government and be leased to a private operator.

The eventual hope is to start work next year on a 300-passenger, 100-knot hydrofoil able to make the run from the U.S. to Europe nonstop. Crossing would take 36 hours, with one-way fares about $175. Annual passenger capacity would be about the same as a superliner such as the United States.

WASHINGTON OUTLOOK

WASHINGTON
BUREAU
JAN. 23, 1960

A BUSINESS WEEK
SERVICE

Prospects for an eventual tax cut are on the rise. There is a surprising amount of tax-cutting talk in the Capitol. It amounts largely, at this time, to speculation that turns on the future health of the economy. But the talk is coming from substantial sources.

The outlook in a thumbnail: No reductions in 1960, but steady development of a climate that will be favorable for Congressional action next year on lower rates to be applied by 1962.

Encouraging talk emanates from inside the Administration.

Budget Director Stans says a cut may be possible in 1961. This sounds the buzzer that politicians in both parties have been waiting to hear. Stans disavows speaking an "official" viewpoint, labeling his remarks instead as "personal." The disclaimer is viewed here as a weak one. Stans speaks for the Administration, and he always chooses his words with care.

Treasury Secy. Anderson passes up an opportunity to contradict Stans. Anderson declines, however, to pick a target date for tax cuts. He wants to see debt reduction a common practice first, tax cuts second.

Pres. Eisenhower's economic advisers—some of them, at least—take up the optimistic line in private conversations. They agree with Stans that 1961 might well be the year, with the cuts to take effect in 1962.

Is tax cutting politically popular? There is not much evidence now that the idea contains any magic. At least, few members of Congress fresh back from a vacation among the voters profess to feel pressure on this issue. But this is a situation that could change.

The coming spring may supply a good answer. By then, the talk coming out of Washington will have had time to sink in. By then, also, Congress will have passed some fiscal 1961 appropriation bills and other spending legislation. Better judgment will be available on the key question: How fat will the surplus be?

The arithmetic may be such that Democrats, in grasping for election year initiative, will decide to stir up the tax issue. There is a possibility they can make it a big one.

Consider a string of "ifs." If a large portion of the estimated surplus of $4.2-billion for fiscal 1961 (page 28) does materialize, if economic growth continues and another $3-billion to $4-billion of potential revenue can be projected for the following year, and if some existing tax loopholes can be closed or narrowed, then a $7-billion to $8-billion kitty can be had—on paper, at least—for fiscal 1962. The way would be open for Democrats to push for more spending, some debt retirement, and tax reduction simultaneously.

GOP strategists in Congress are being cautious for the moment—more so, in fact, than the Administration sources. The impression is strong that they would favor tax revision—elimination of some inequities in existing law —ahead of general tax-cutting. For the moment, Nixon is held to share this general view. But the groundwork is being laid, nevertheless, for him to get into the van if a tax-cutting bandwagon starts rolling.

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Some important tax legislation is due from this Congress, no matter whether the session becomes embroiled in debate on general reduction.

The corporate tax rate of 52% will be continued, with hardly a murmur of protest, in accordance with Eisenhower's budget message request.

WASHINGTON BUREAU
JAN. 23, 1960

So will the Korean War excise tax rates on liquor, tobacco, automobiles, and automobile parts. These were hiked as a "temporary" expedient a decade ago and have been kept up ever since.

Congress may resist on telephone and transportation taxes. A year ago, it repealed the federal excise on local telephone use and reduced the transportation levy. Now Eisenhower asks for a delay in the July 1 effective date. Congress will be reluctant to reverse its own judgment so soon.

Eisenhower's legislative program, as detailed in his budget message, is generally viewed in both parties as minimal in the social and welfare areas. There is disagreement between the parties, of course, on whether this is a proper approach. But this is an argument that will be settled—in part or in whole—by the coming election.

The program reflects the central thesis advanced in the annual economic report (page 27). It boils down to a belief that a dynamic private economy should provide more, and the federal government less, of the locomotion into a future that Eisenhower figures to be rosy.

Two major concessions to political reality do show up in the Eisenhower legislative program for the last year of his Presidency.

The first is in public works, where Eisenhower abandons the "no new starts" policy. Congress overrode a veto to approve new projects last year. That lesson learned, Eisenhower this year budgets 42 new starts for flood control, hydroelectric generation, and irrigation.

The second is in labor. Eisenhower's failure to recommend major changes in basic labor law for dealing with national emergencies is a disappointment to some congressmen in both parties. The disappointed group, however, is a small minority. The overwhelming majority, which would not have faced up to it even if Eisenhower had made recommendations, is relieved that the White House chose not even to mention the problem at this time.

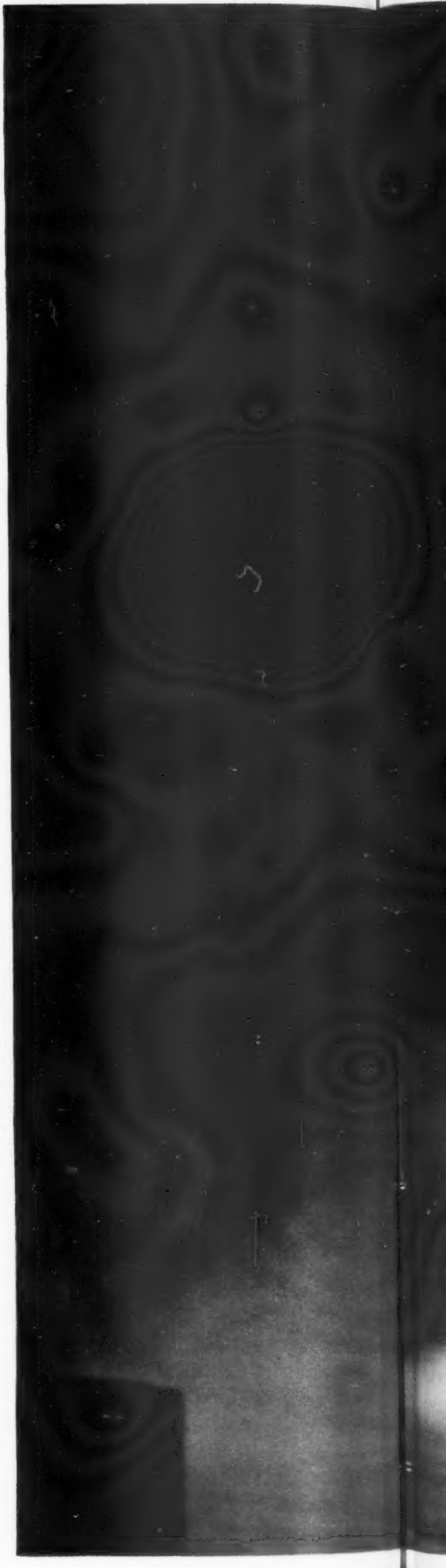
Chances for interest rate legislation take a slight improvement.

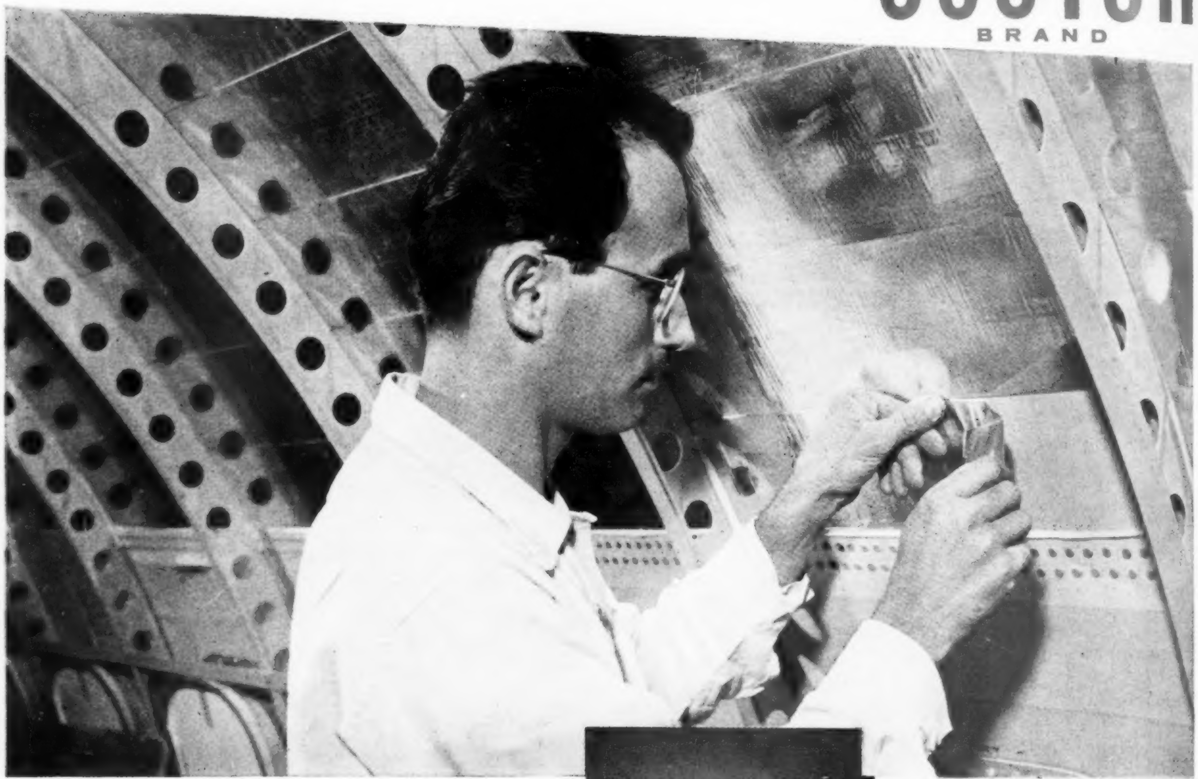
The Senate Finance Committee may break the impasse on Eisenhower's request for removing the statutory 4¼% interest ceiling on long-term government bonds.

Sen. Robert S. Kerr works on a compromise that would waive the ceiling for a two-year period and, possibly, put a limit on the dollar volume of long-term bonds that Treasury could sell at rates above 4¼%. Kerr ranks second on the committee, behind Chmn. Harry F. Byrd, but is regarded as the group's best behind-scenes political operator. Moreover, Kerr works very closely with Senate Leader Lyndon B. Johnson, whose support will be needed for any action.

This development coincides with reports, denied by influential House Democrats, that majority members of the Ways & Means Committee are exploring a similar accommodation of the Administration.

Republicans are still skeptical. The most optimistic of them rate the interest bill's chances this year as no better than 50-50. Indications are that Treasury would accept a Kerr-type compromise if it is offered, but GOP sources still wait for word that the Lyndon Johnson-Sam Rayburn leadership in Congress will get behind it.





Steel Profits Sure to Be Better

● The first half of 1960 is certain to break records, and the high operating rate of the second half should offset any upward creep of costs to a great extent.

● Some of the less profitable steelmakers will be tempted to shove prices higher, product by product, as the year goes on, but competition discourages this.

● You can't be sure how much profit margins will be eroded by rising costs, but most experts agree it won't be enough to block the setting of an industrywide record.

While there's still a lot of confusion over what the steel settlement means to steel costs for this year or next, one thing emerges clearly this week: The steel industry will tally record earnings in 1960—with or without an across-the-board price increase.

It's still early, of course, to be precise about steel company earnings, especially since there's no way to estimate the impact of the settlement's fringe costs in the absence of an offsetting price increase. Roughly, though, the outlook shapes up this way:

The first half of the year will be a record-breaker (BW—Dec.19'59,p32). Non-wage costs will be higher, and the industry is not now expected to put into effect an across-the-board price increase. But most cost advances should more than be made up by the earnings leverage that is built into a high operating rate. Typically, J. L. Mauthe, chairman of Youngstown Sheet & Tube Co., says his company has plenty of orders to insure virtual capacity operation for at least six months.

• **Rush to Order**—There have been few cancellations of orders in the wake of the settlement, as some industry men had feared. And there's bound to be lots of advance buying as consumers restock inventories.

Thus, an output of 70-million ingot tons of steel in the first six months—compared with 1959's first half of 64-million tons—doesn't seem out of order. This means that earnings will be at record levels, even better than the profits in 1959's first half.

The second half is more of a question. After inventories are restocked, there probably will be a tendency for output to decline. But some steelmakers feel it may not be a significant drop. However, any dip in volume will bite into profit margins, and some steelmakers will be tempted to raise prices of their products as sales decline. If, say, steel production is down 10%, this may mean an even bigger drop in earnings in the second half.

• **Year's Pattern**—In brief, it looks like a 130-million ingot ton year, with steel earnings following this course: In the first and second quarters, $330-million each; then a decline to $290-million in the third quarter, about $275-million in the last quarter. This would be a total of $1.225-billion, a record by not quite $100-million over 1957.

Individual companies will show deviations from this pattern. The strike kept 1959 earnings of most companies close to 1958 levels, despite a rich first half. But 1960 should bring record earnings for many. Heavy demand is piled up for cold-rolled sheet and strip (used chiefly in durable goods items), galvanized steel (construction), tinplate, and hot-rolled bars. Companies strong in these will do better than average.

• **Who'll Do Best**—Generally, those non-integrated companies, which didn't fare so well in 1959's strike year, are expected to show the biggest percentage increases in earnings. The fact that some of these companies rely heavily on scrap for their furnaces might work against them if scrap prices rise. But there's nothing to keep producers of high-priced specialty steels from turning in very impressive profits, since record tonnage is expected in these areas.

Wall Street stock analysts suggest that any number of steelmakers will chalk up new peak earnings.

Alfred Rudd of Kuhn, Loeb & Co. thinks Youngstown could earn as much as $16 per share this year; its previous high was $12.62 in 1956. McLouth Steel Corp., which gets roughly 35% of its sales from General Motors, should also show record profits. Some analysts believe it could earn $10 per share in 1960, close to double its previous high. Similarly, a high level of auto output will benefit National Steel Corp., which counts the auto and can industries as its best customers.

Acme Steel Co., heavy in fabrication of steel stripping and stitching wire, figures to show record earnings of close to $3.75 per share, according to some stock analysts. Carpenter Steel Co., aided by the tax-loss credit gained from its new Bridgeport plant (formerly owned by Northeastern Steel), could easily exceed its previous peak earnings of $4 per share. On the West Coast, Kaiser Steel Corp. sees its best year. Jack L. Ashby, president, says Kaiser will produce 2.5-million ingot tons in 1960; this means earnings higher than ever.

I. The Price Problem

A hike in prices, of course, would go a long way to insuring this optimistic outlook for earnings. But steelmen are gradually reconciling themselves to the fact that any broad action on price increases will be delayed until after Dec. 1, when the first 8.6¢-an-hour average wage boost goes into effect. It's a different prospect, though, on "extra" charges for special alloys, unusual melting or rolling techniques, or tolerance variations.

• **Holding Prices**—There'll be a temptation for some of the less profitable steelmakers to increase such extras. But the realities of the market will curb any widespread use of line-by-line boosts.

As long as demand stays strong, as it should through the first half, it's possible that a struggling producer can sell the same kind and quality of, say, wire rods for $130 per ton that the rest of the trade sells for $128. But he won't be able to get that extra $2 a ton after inventories reach safe levels. And he'll lose business from every customer who knows he's paid $2 per ton extra when the supply was tight.

• **Competitive Selling**—In some areas, competition is another factor to consider. The threat of aluminum may discourage increases in stainless items; import competition will probably keep prices of barbed wire, nails, and fence from being hiked.

But the prospect is that some producers will try to tag on extra charges to offset their increased costs—if they can get away with it. It is likely to be a piecemeal operation, although some industry observers think it may become standard operating procedure.

• **Favorable Position**—This school of thought, which includes some top Washington economists, feels that the strike settlement was pretty favorable to

the industry. Unlike the situation in the three years following the 1956 contract (when no ceiling was put on cost-of-living increases), the industry knows just what its wage structure will be for the next three years. And the 3% increase in costs—by this school's reckoning—is in line with the productivity trend, although there's been a good deal of variance in the year-to-year figures.

Economists following this line of thinking believe steel will be hard put to push over broad price increases, but they do see a piecemeal rise on certain individual charges.

II. Imports a Worry

If pricing is a ticklish problem for steel, imports are even more so in certain areas.

Few steelmen in the Pittsburgh area look for any marked slowdown of imports in 1960, as compared to 1959, the first year in history the U.S. was a net importer. Some predict net imports of about 2-million tons as likely, adding that the flow is subject to change, depending on European demand. Outsiders in Wall Street and Washington aren't so gloomy. They look for the U.S. to become a net exporter in 1960.

In any case, domestic mills feeling the impact of imported steel will show up only in specific areas and products. Brokers will have less incentive because they will no longer be getting premium prices. Through most of 1959, and particularly during the steel strike, European steel sold at premiums. These premiums have been thinned considerably and will dwindle further.

• **Effect of Time**—Meanwhile, each passing month will work against foreign steel from a price viewpoint simply because domestic supply will improve. But in such products as wire, nails, and rebars, competition will be rough. For example, until two years ago the Midwest was relatively untouched by foreign wire products. Now estimates are that one-third of the wire sold in the region is foreign.

III. Shifting Costs

The unpredictable running through any discussion of steel earnings is the cost mix—employment, scrap, iron ore, or what have you. Even if the settlement package does not run so high as the 41¢ figured by the industry—it remains an imponderable.

For example, the steel companies have figured that the costs of purchased goods and services will go up 1¢ for every cent-per-hour in employment costs over a period of time after the signing of a new wage contract. In recent years, it has been fashionable in steel to argue that the ratio should be 2-to-1 or 1½-to-1. However, U.S. Steel, the price leader, has stayed close to the 1-to-1 ratio.

To the extent that the new steel agreement is an improvement on earlier contracts, it ought to follow that the 1-to-1 ratio should decline a bit. That should be particularly true if future contract negotiations outside steel are influenced by steel's pact—especially in delaying actual cash wage boosts. But whether this is going to work out in practice is open to question.

• **No Shortage**—Ore and scrap costs don't seem of real concern to steelmen. All of the scare talk around Cleveland about iron ore shortages during the winter or early spring has faded. By May 1, ore should be available in enough volume to ease any pinch that any company might have. This doesn't mean that no company will be faced with moving iron ore between some of its own plants—some of this is going on now because of diminishing supplies—but steelmakers feel that this cost does not loom large and, on the whole, should have no measurable effect on steel profits.

It's true that the present decline in ore supplies is forcing some mills to purchase scrap—but here, too, there's no talk of a shortage. Chicago steelmen say they think scrap prices look relatively stable, and Acme Chmn. F. M. Gillies guesses prices won't go up more than $5 a ton over the present $41 a ton price. He says: "We have enough on hand to operate for several months if prices were to go skyward, yet we buy now just to stay in the market."

Broadly speaking, increased costs in some areas will, in part, be offset by increased efficiencies. The steel business has been working hard and spending hard to improve profit margins; some have achieved only moderate success, others can boast of substantial savings.

• **Better Plant**—Many producers will be able to register improved profit margins in 1960 because of previous spending. Youngstown Sheet & Tube, for instance, will be reaping the rewards from its new pipe mill and tinplate line, which will be close to full-fledged operation for the first time. Spending by the big companies has been imitated by some of the smaller ones, which will also show a pickup in efficiency.

Thus, profit margins ought to be very good in the first half, where volume hits a peak. The very nature of the industry, which has high fixed costs and a heavy ratio of investment to sales, makes it most profitable when sales are high. How much profit margins will be eroded by higher costs still can't be precisely pinned down—but it certainly won't be enough to stop the industry from turning in a banner earnings year. END

In Finance

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New York's Life Companies Push—Gently—For Right to Sell Fire, Casualty Policies

Several of New York's—and the nation's—top-ranking life insurance companies began a low-pressure campaign last week for permission to sell fire and casualty insurance. At present, New York law bars life companies from selling fire and casualty lines; casualty companies, on the other hand, have been allowed to acquire life insurance subsidiaries. If the campaign is successful, and the New York life companies do convert to multi-line operations, the effect would be to destroy the traditional, but waning, separation of life from casualty insurance.

Any move by the life companies into fire and casualty insurance, however, is likely to be slow. None of the companies pressing for changes in the law—which include such giants as Equitable Life Assurance Society of the U. S., Mutual Life Insurance Co. of New York, and New York Life Insurance Co.—has as yet formulated plans to offer fire and casualty lines. And insurance men caution that the losses that have hit auto insurers recently should discourage life companies from jumping in quickly.

There is little doubt that the life companies are feeling increasing competitive pressure from multi-line companies such as Aetna and Travelers, and from the independent, direct-writing auto insurance companies—particularly State Farm Mutual, Allstate, and Nationwide—that now sell life insurance.

John G. Kelly, assistant general counsel of Mutual of New York, says that if the New York law isn't changed the state's life companies will be at a "distinct and increasing competitive disadvantage" compared to casualty companies which sell life insurance.

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Justice Dept. Will Appeal Ruling That Du Pont Can Keep GM Stock

The Justice Dept. last week served formal notice that it intends to appeal Judge Walter J. LaBuy's decision that du Pont can keep its 63-million shares of General Motors stock. The action, which had been expected, tosses the case back into the lap of the Supreme Court.

Last October, LaBuy gave du Pont a clear victory when he said that it did not have to sell its GM shares as long as it passed voting rights on to its own shareholders. He rejected the government's main argument that mere possession was a violation of the Clayton antitrust act.

Du Pont's Pres. Crawford Greenewalt called Justice's action a further pursuit of its "11-year vendetta" against GM and du Pont stockholders. **But Atty. Gen. William P. Rogers countered that the appeal was necessary because LaBuy's decision "fails to remedy" the antitrust** violation found by the Supreme Court. Justice insists that a violation exists unless du Pont sells its shares.

Many observers think the key to the case rests with Congress, not the Court. The Administration is backing a bill that would grant tax relief to shareholders with stock in companies that violate antitrust provisions, which applies to GM and du Pont. If Congress passes such a bill, then du Pont may agree to divestment.

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U. S. Seeks to Ease Allowances On Depreciation, But Close a Loophole

The Administration is moving to liberalize depreciation allowances. But as a quid pro quo, it is asking Congress first to close a loophole that has allowed some companies—notably auto rental outfits—to benefit by depreciating property faster than the actual decline in market value.

The Administration wants to deny capital gains treatment to profits from the sale of depreciated property. The profit in this case would be the difference between depreciated value on a company's books and actual market price. Instead it wants such profits taxed as ordinary income. For a corporation this would mean a 52% rate instead of a 25% rate.

In return, Eisenhower said in his budget message this week, **the Treasury would be more inclined to accept the taxpayer's judgment as to the useful life of his property.** At present, the useful life that the Treasury allows for depreciation purposes is spelled out in very specific terms in Internal Revenue Service Bulletin F. Accountants say that IRS agents currently allow little, if any, deviation from the regulation. If the Treasury does abandon Bulletin F as an inflexible guide, and there is a general shortening in the useful life that's allowed for depreciation, the effect, of course, will be to increase depreciation charges.

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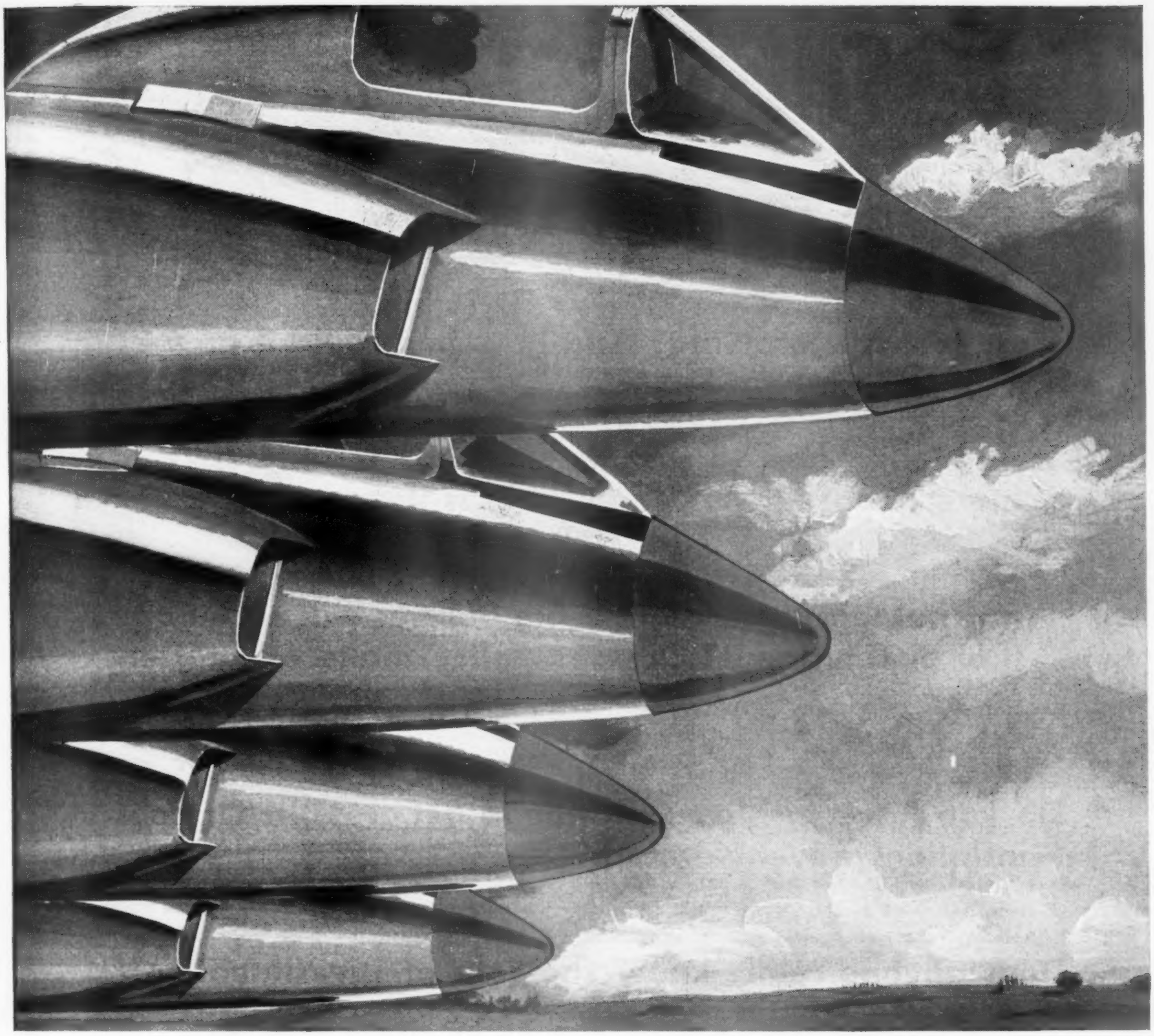
Finance Briefs

Prices of second-hand ships, which started to slide in 1957, hit bottom in 1959, according to Jacques Pierot, Jr., & Sons, a leading ship broker. The firm noted this week that **most U. S. shipowners don't look forward to 1960 despite the "mild optimism" among European shipowners caused by booming economic activity.** The problem in the ship market, Pierot says, is simply too much carrying capacity combined with overbuilding spurred by the Suez crisis. Pierot predicts that current depressed prices for ships—in some cases only 10% of prices prevailing in 1957—aren't likely to turn up substantially in the foreseeable future.

After 125 years, the Bowery Savings Bank, the nation's largest mutual savings bank, issued its first annual report this week to its 578,000 owner-depositors. **The report clearly shows the impact of the Treasury's "magic fives," which, over-all, lured some $100-million out of the savings banks.** For the Bowery alone, yearend deposits were $1,561-million, down about $9-million from last June. From Dec. 31, 1958, deposits increased only a scant $5-million, the smallest increase since 1942.



The United States Invents a

- Is the American economy growing as fast as it should?

- How fast is it growing? And how fast could it grow?

- Is economic growth just more goods for the sake of more goods? If not, then what is it anyway?

- What influences growth? What policies will encourage it or discourage it? Or does policy make any difference?

- Do you have to have inflation to get growth? Or does inflation prevent growth?

- Does anyone really know the role of investment? Of taxes? Of wages? Of profits?

- Why do some countries grow fantastically while others stagnate?

- Questions like these are agitating businessmen and politicians engaged in one of the most confused and confusing economic debates in history.

- In this Report to Executives BUSINESS WEEK presents a fresh and important analysis of this issue—the most important economic issue facing the country today.

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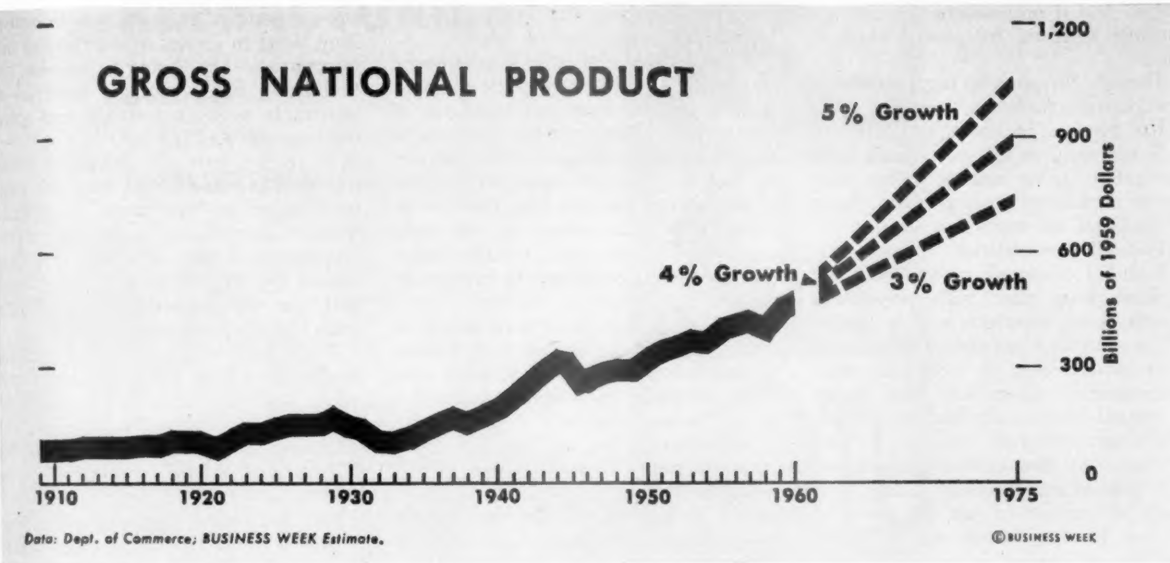
a New Way to Grow



The U.S. has accepted the fact that it must grow — or else. Millions more people must be taken care of. A fast-growing labor force will need jobs. Living standards must rise if social tensions are to be eased without resort to government dictation. Russia's bid for domination must be turned back.

Growth, indeed, has become a paramount national concern. It will be a top political issue this election year. Nevertheless, most of the debate over growth expends itself just juggling numbers in rather superficial argument about the statistical race between the U.S and the Russians.

Such discussion merely skims the surface — and can misdirect economic policy. For it overlooks a fundamental and far-reaching change in the growth process that is developing in the U.S.

Economic growth — really — involves more than statistics on output. It is the increase in the capabilities of the economy for production. Most fundamentally, economic growth means growth in a nation's underlying ideas and skills. The immediate generator of economic growth is investment. Partly, investment is set in motion by economic forces. More basically, investment arises from new ideas, new developments in science and technology, from education, from research. Innovations — new products, new processes, new resources — are the real seeds of long-term economic growth.

Now the U.S. has made a fresh contribution to this growth process. Americans have discovered that these innovations need not be the accidental, sporadic things they have been in the past. By a great new emphasis on research, by systematizing innovation — industry and government now make regular provision for the occurrence of new and unpredictable developments. This process is just beginning. But already it is furnishing the kind of spur to growth that came earlier from such individual developments as railroads, electricity, automobiles.

This discovery may turn out to be a qualitative change in the economy — one of the same importance to future growth as the development of the concept of capital investment itself was during the past two centuries.

The new discovery is basic. But in itself it does not guarantee adequate growth. That also depends on the over-all state of the economy and on the balances within it — particularly on incentives for investment and innovation and growth. Economic instability—depression or inflation—could frustrate growth. Keeping growth and stability in balance is the daily task facing the nation's leaders.

To find out how this new U.S. experiment in growth is getting under way, and what it faces—turn the page.

Story starts on page 52

Why the Debate on Growth

GROWTH HAS emerged as the fundamental economic problem of our day. It's likely to be one of the key issues of the coming Presidential campaign. And it promises to stay a major national concern for many years to come.

Though the growth issue is one of bewildering complexity, one thing about it has become increasingly clear: The U. S. economy, in the years ahead, must grow at a strong rate or suffer some highly unpleasant consequences. Some of these are obvious, some less so:

The U. S. population is increasing fast—and if economic growth does not at least keep pace with population growth, living standards will decline.

The country's population is growing at an annual rate of 1.8% per year, compounded. At present that means an annual increase of 3-million people—each year we grow, roughly, by one Chicago. At that rate of growth the U. S. population, now 178-million, will reach 300-million in just 30 years (in the last 30, despite one decade of depression, we added 56-million to the population). With that in prospect, we're going to have to run pretty fast just to stay in the same place in terms of income per capita.

Without strong and sustained economic growth, the U. S. will have a serious and continuing unemployment problem on its hands, for the labor force is also growing rapidly.

In the last decade the labor force has been growing by some 800,000 each year. But now we have coming on in a rush the enormous crop of war and postwar babies—who have been making our educational system burst at the seams in the 1950s and are just starting to enter the labor force.

In the 1960s, the schools and colleges will be more crowded than ever—but the labor force will be growing by 1.1-million a year from 1960 through 1965, by 1.4-million a year from then through 1970. With more and more efficient machinery—with increasing automation in industries that have been big labor users—will there be work enough for all the extra hands?

Too slow growth would mean a sharper battle over the shares of the national income going to labor, management, farmers, shareholders, and property owners. That would probably lead to more direct government intervention to control the intensified conflict, determine who gets what.

When total national income is growing faster than population, there is less occasion for conflict over how much each group gets, because all groups are either going forward or, at worst, holding their ground. Without such growth in national income, each group can advance its interest and enlarge its take only by damaging the interest—reducing the income share—of others.

Clearly, labor and other lower-income groups aren't content to settle for their present income level and standards of living. Labor's pressure for rising wages is certain to continue. Unless the rate of growth is at least equal to the rate of population increase plus the rate at which wages are pushed up, the consequences will have to be **either inflation or a reduced return to capital—or both.**

The inflationists have been driven to cover, however, for reasons both domestic and international. U. S. labor and other groups are no longer so bedazzled by a "money illusion," a belief that more money in the pay envelope automatically means that much more food, clothing, housing, or services. There's greater realization that an increase in money wages or incomes is worthless if prices rise, too, and the new wages buy no more than the old.

Internationally, the position of the U. S. in the world, both as banker and trader, makes inflation self-defeating. The U. S. is in a balance of payments bind, has had a rather rapid and persistent loss of its gold reserves. Further inflation would make U. S. exports less competitive, aggravate the balance of payments problem, possibly set off a flight from the dollar and breed an international financial crisis.

If the U. S. keeps a lid on inflation, and at the same time there is not a strong national economic growth, any attempt to accommodate labor's demand for higher real income and rising living standards would mean cutting the return to capital. This could mean, too, a cut in capital investment within the U. S. economy—and, again, the likelihood of a capital flight from the U. S. Such a fall in investment would hold back U. S. growth still further. Government would be driven to step in deeper and deeper, both to resolve the conflict over income shares and to insure that the fall in private investment did not bring heavy unemployment and economic stagnation following close behind.

Finally, too slow U. S. growth would mean that the Soviet Union might succeed in its bid to achieve world domination through its own growing economic power.

The shock of our lives has been the realization that a political-economic system hostile to our own—a totalitarian system that most Americans, including the economists, thought was bound to limp along in a mess of inefficiency and bureaucracy—has proved capable of mobilizing its human and material resources to produce a strong and growing economy.

In recent years, the Soviet economy has been growing faster than our own, twice as fast or even more. The Soviet leaders have been making powerful propaganda of that, directed particularly toward the world's poor nations, those that are determined to reduce the misery of their people.

That psychological or "demonstration" war—which uses not only economic statistics but also space vehicles and itinerant composers, dancers, and professors to persuade the world that the future lies with Communism—is important in its own right.

But the competition in economic growth is more than a war of numbers. For the real resources generated by the Soviets' growing economy have enabled them to build the scientific, technological, military, and foreign assistance programs that lie at the heart of the Twentieth Century power struggle.

• **New Element**—For all these reasons—which touch virtually every aspect of our domestic and international problems—the growth potential and performance of the U. S. economy have become a crucial national issue.

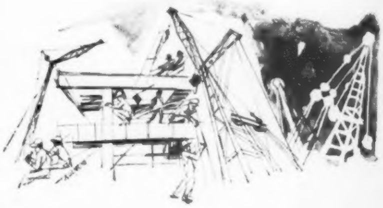
As this issue takes an unprecedented place in the political spotlight, a new element is becoming apparent in the growth process itself—one that's destined to have a powerful impact on the pace of U. S. economic growth in the future. **That element, largely a postwar phenomenon, is the development of U. S. industry's new concept of planned and systematized innovation, built on a foundation of vastly expanded research and development.**

This new principle and practice of making regular provision for the development of many new things is taking increasing hold in U. S. business—though its use still varies widely from industry to industry. Already, it's an important factor, and in the future it's likely to provide the spur to growth that came in earlier periods from particular developments such as steam power, railroads, electricity, automobiles. **In reality, this new way of growth that the U. S. has invented represents a new revolution, a deep-going extension of capitalism's growth process.**

Capital investment represents con-

sumption deferred in the interest of greater production later; and research and development carries the process one step further. It represents a charge against current production in the interests of greater investment—and greater productivity—later. This may be a qualitative change of the same order of importance as the development of the concept of capital itself.

• **Complex Issue**—But this dramatic, new element, though its broad outlines can be clearly seen, is in itself a complex development; and it becomes part of an even more complex growth picture.



What's Growth?

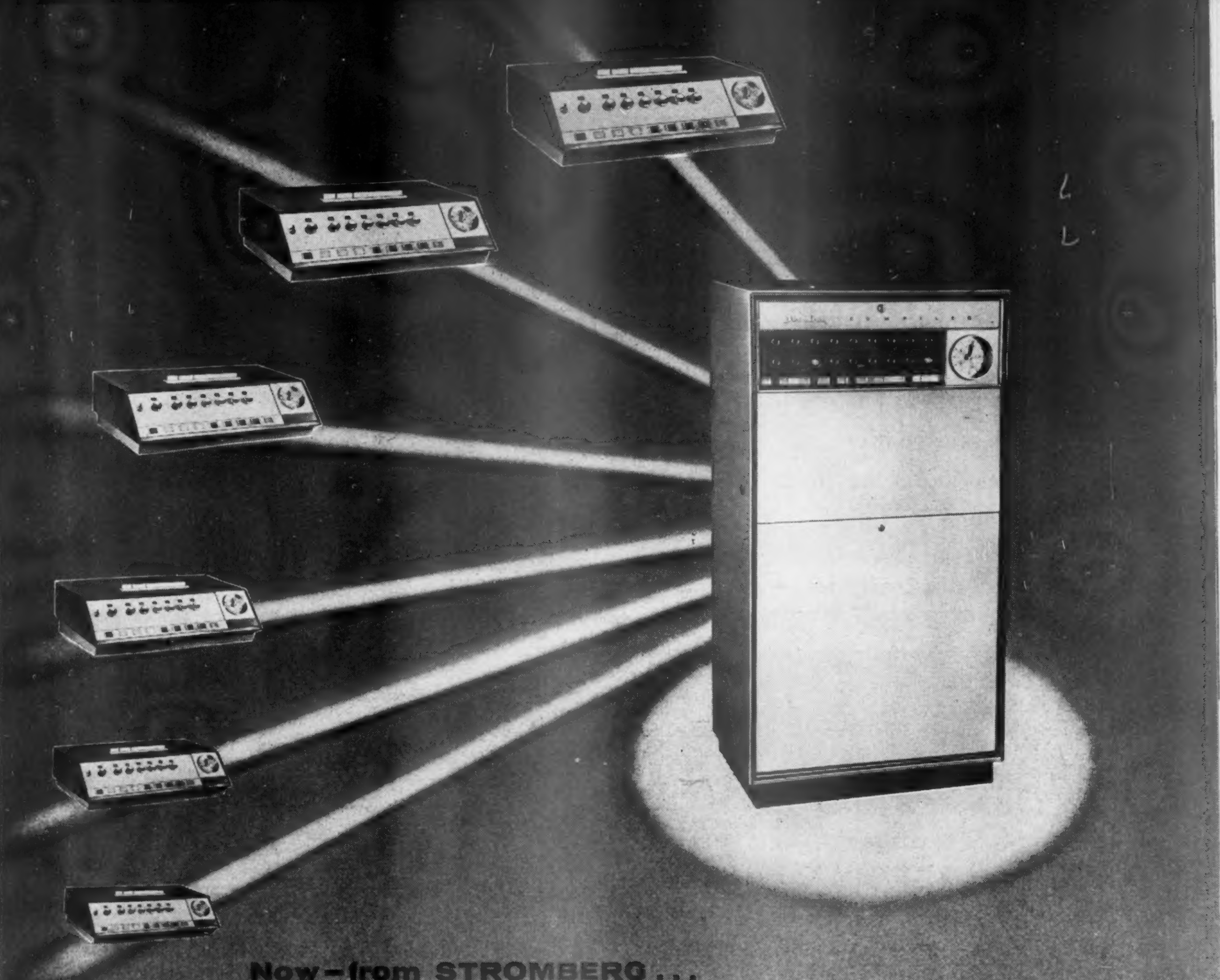
What, first of all, do we really mean by economic growth? And how do we go about measuring it?

Much of the confusion over the growth issue arises from the welter of apparently conflicting statistics that rival politicians and economists have been hurling at each other. In truth, any journeyman economist could produce to order a veritable zoo of growth rates, with specimens to please every partisan who would like to prove that the U.S. economy is stagnating, or that it is growing as fast as it ever did, or faster than ever, or that it is lagging way behind the Russians, a little behind the Russians, or not behind them at all.

All these data do, of course, have one thing in common: They're based on calculating the rate at which some series of numbers representing annual production or income is, or is not, increasing.

What leads to the variety of results is this: Depending upon the starting point for your time series and its terminal date—together with the periods you pick for comparison with other countries—you may prove almost anything you like (BW—May23'59,p133).

This is not to suggest that all such numbers are just something pulled out of a hat, or that it's not necessary, at some point, to try to lay out the data in a way that will give a sharper and clearer guide to events and to policy than words alone can do. But before we start working with the numbers, we ought to be reasonably sure we know what we are talking about, what it is

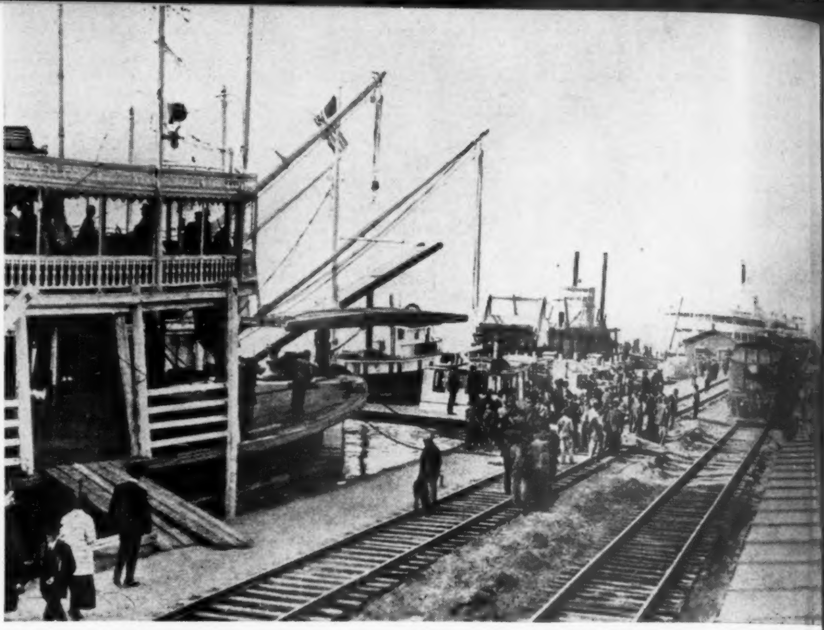


A New Way to Grow

The Baton Rouge growth story is the U.S. story in miniature.

Technology—the refinery put up in 1909 by a Standard Oil of New Jersey subsidiary—began it. Product innovation—the auto—and the impact of war and population growth spurred it on.

Now (pages 60-61) the fruits of research build its future.



IN 1909, when Esso refinery was started, Baton Rouge was a drowsy river town of 15,000, with the river boats tying up along Front Street; the new refinery created 700 new jobs.

WORK GANGS were recruited from local population; these pipefitters helped build railroad pipe tunnel in 1909.

OIL FOR AUTOS was transported in bottles—but autos (Ford designed Model T in 1909) were soon to revolutionize oil industry.

the numbers are supposed to describe.

• **Slippery**—To get at that, it's best to go all the way back to the concept. And economic growth is one of the most slippery and elusive concepts in a slippery, "soft" science.

The trouble arises from the fact that **the concept of economic growth** (like so many concepts in the social sciences) **is really an analogy derived from the natural sciences—specifically, in this case, from biology.** Years ago Simon Kuznets suggested that economists concerned with growth might get a better idea of what they were talking about if they took a closer look at the biological source of their analogy.

Biological growth, according to the classic definition of D'Arcy Thompson, is "a process, indirectly resulting from chemical, osmotic, and other forces, by which material is introduced into the organism and transferred from one part of it to another."

So economic growth ought to involve similar processes in economic organisms.

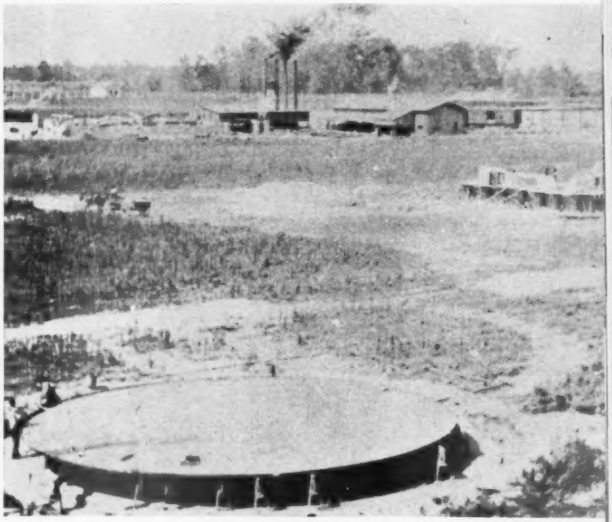
But what is an economic organism? Clearly it's not the flow of goods and services that issue from the economy each year. Rather it is the complex of people, factories, stores, farms and forests and rivers, dams, houses, banks, airports, autos, highways that produce the stream of goods and services.

• **Moving Picture**—If you wanted to take a picture of that economic organism growing, you ought to do it the way a cameraman takes a picture of a flower growing. He'd show you that biological growth from the beginning—first of all, the seed popping, the stem climbing out above ground and growing into the plant, then the bud forming and the flower bursting into bloom.

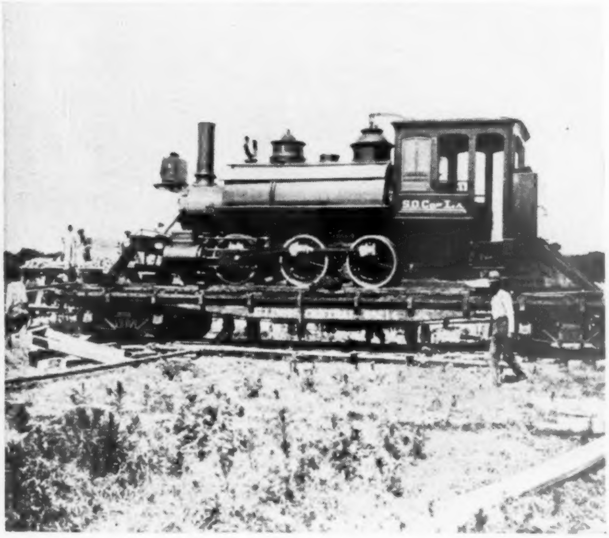
The picture of an economic organism growing—as in the views on these pages of the development of the Baton Rouge area—would show you, similarly, the changes that come to a dynamic industrial area over the years—rail lines spreading, factories building, new and more complex industrial equipment coming along. It would show you, too—as at Baton Rouge—some of the changes in the economic actors—the multiplying population, the expanding cities, the changes in occupations of the people as industry advances.

• **Superficial**—Such a pictorial repre-

GENERAL OFFICE was temporarily out in fields; officers and visitors used horses and wagons, though autos were coming into use.



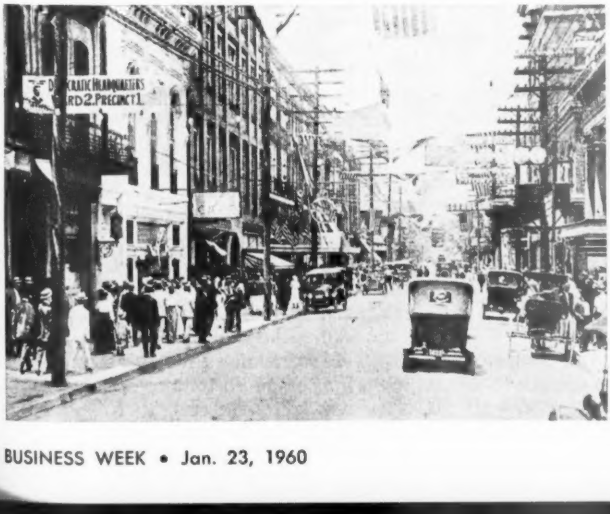
FIRST CONSTRUCTION for refinery was in cotton field; it began industrial transformation of whole area.



FIRST SWITCH ENGINE to arrive at refinery brought new and faster transportation to speed up the industrialization of the area.

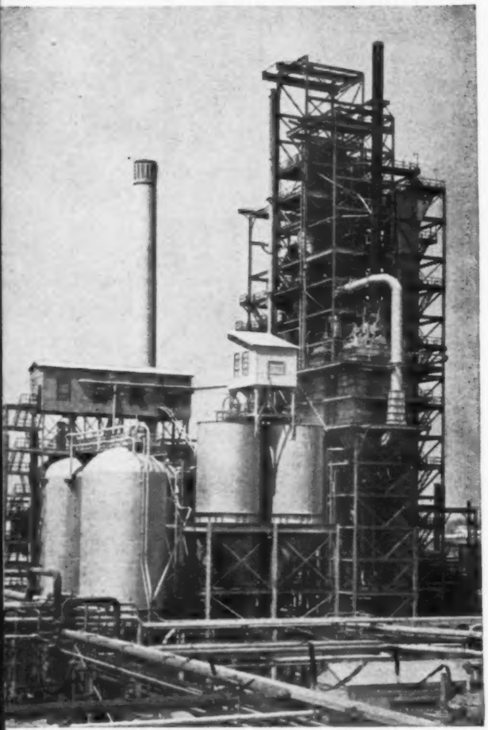
WORLD WAR I stepped up demand for oil, nearly quadrupled crude run—and brought new construction.

POSTWAR BOOM made Baton Rouge a thriving city, more than tripled Esso plant area; autos meant more growth to come.



BY 1930s, refinery had new pipe stills, cracking units—enough employees for big picnic (turn page).

A New Way to Grow



WORLD WAR II created need for aviation gas—and at Baton Rouge, world's first commercial fluid cat cracker turned it out.

NEW units, new processes came in 1950s; big Esso plant now turns out 600 products.

sentation of the growth of an economic organism tells a dramatic story—but it's also somewhat superficial. It does show you quite effectively the outer manifestations of growth. But it can't show you the growth beneath the surface that has been making possible that outer growth—the underlying growth in ideas, in skills, in technology.

In the same way, if you take the economy as a whole instead of a single industrial area, it would be tough enough to try to estimate numerically even the economy's changing surface. To do it, you'd have to put dollar values on the changing stock of usable land, labor, and capital goods.

But to measure the value of the underlying growth of ideas is quite impossible. At a given moment, the ideas may exist in the separate minds of researchers who have not found a way to link them to the ideas of other researchers. They may even be due for enormous productive application, but for the time being still be locked up in the files of a great corporation that's not yet ready to make its move with the new product or new process.

• **Latent Growth**—It will not do to torture the analogy between economic and biological growth. Nevertheless, there's one more comparison that's of great fundamental importance. That's the basic distinction in both cases between growth of the organism—in economics, the growth of the system's productive capacity in the deepest sense—and the mere growth in its current rate of operation.

Just as a growing boy may, for a time, be sick and lie in bed doing nothing, but still be growing, **so may a nation's economy be in a temporary recession, or even a long depression, and still be growing.**

There are at least two examples in recent history that show just how much this distinction can mean.

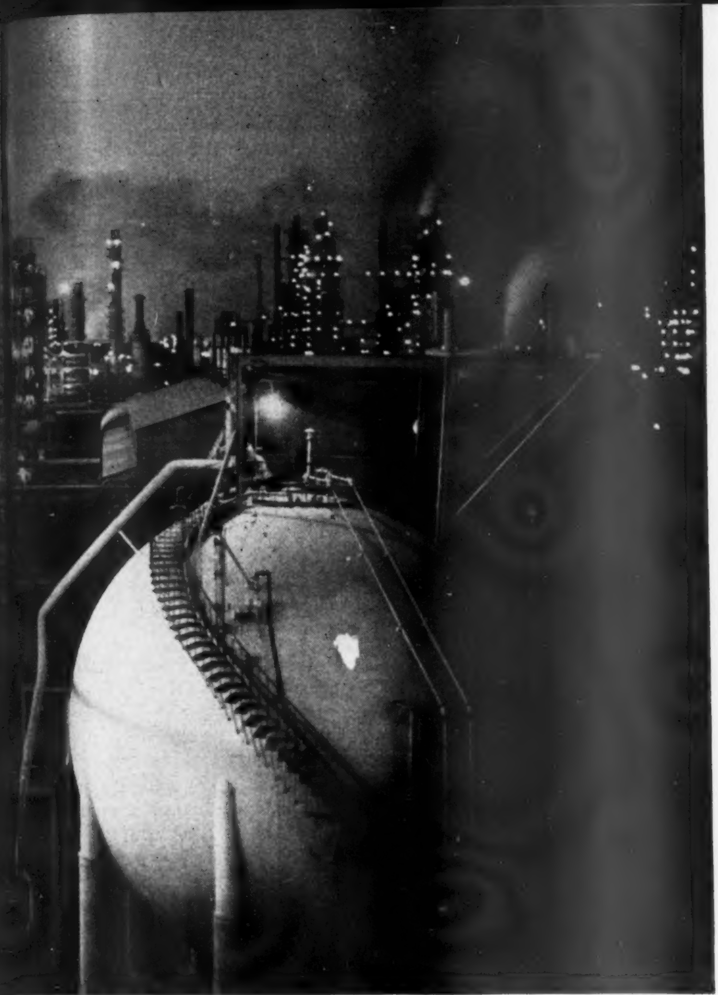
• **Germany's Case . . .**—In World War II Germany was devastated by Allied bombing and ground fighting; the remaining German population was embittered, demoralized. To anyone arriving in Berlin or Frankfurt in late 1945 or 1946, the scene was a nightmare of shattered buildings, a shattered culture.

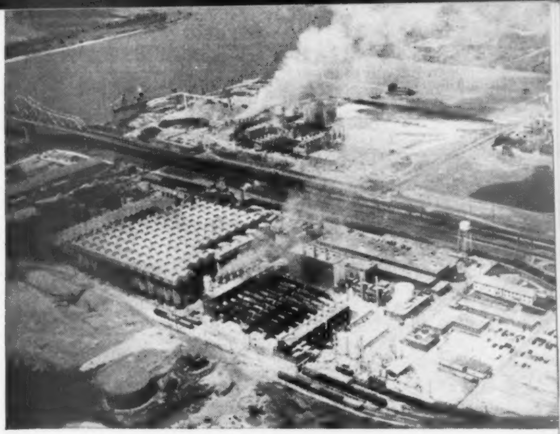
So it seemed. Yet only a few years later the new Germany had become the economic powerhouse of Europe—not merely what it was in 1939 before the war, but a still bigger and more powerful economy, crowded into a smaller space.

"I always thought it was impossible for the German economy to recover," says Theodore Schultz, newly elected president of the American Economic Assn., who served with Allied occupation authorities in Germany just after the war. But he adds, "We were dead wrong—British economists, American economists, and for that matter, Germans." They had all underestimated the real growth forces in West Germany. The plants and cities that had been destroyed, says Schultz, "were really quite secondary, minor details remedied in very short order."

• **. . . And America's**—Was the German case something special? You can use U. S. economic experience to show much the same thing. After the 1929 crash, the U. S. economy stagnated for almost a decade of depression. In 1938 we were still producing less than in 1929.

But when war came and full employment was restored, did we go back only to the 1929 level? On the contrary, we far surpassed it. By 1942 the nation's real output had already risen one-third above the mark set at the end of the 1920s boom. In a great rush the nation made up for the decade of depression; almost overnight it climbed up to





OTHER industries flocked in; here are Kaiser Aluminum, Ideal Cement, Stauffer Chemical.

BATON ROUGE TODAY is a city of 165,000; refinery nourishes growing petrochemical industry.

where it might have been if there had been no long depression.

It was indeed as though the economy had been "growing" through the years while it was functioning at so low a level of output and employment.

Measuring Growth

This quick look at the resemblances between economic and biological growth makes it clear that it's quite impossible to put into numerical tables or series the underlying organic growth of the U.S. economy.

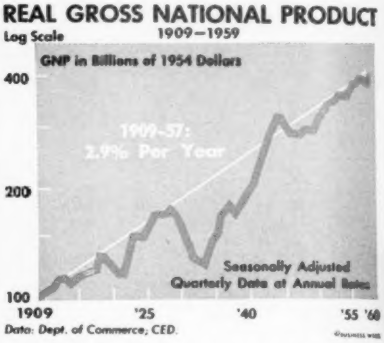
So economists have had to settle for the next best thing—which is to use current measures of economic output or income and seek to derive long-term growth trends from these "performance" records. They do this on the assumption that there is some meaningful relationship between changes in output and changes in the capacity of the underlying economy. And that seems, indeed, to be the case over the long run.

Staff economists of the Committee for Economic Development have worked out some charts—labeled "growth reckoners"—that help show the way current output apparently keeps

LABOR FORCE of refinery has come a long way since 1909, too; with today's advanced technology, it's a highly skilled group, including both engineers and technicians. One of the newest units requiring special skills is the ethylene purification unit.

returning to a long-term trend. These charts are plotted on a semi-logarithmic scale which makes a constant percentage increase show up, not as a rising curve, but as a straight line pointing diagonally upward. In this way the charts straighten out long-term growth trends, making it easier to appraise short-term swings away from them.

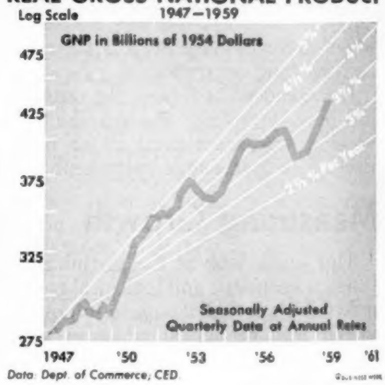
REAL GROSS NATIONAL PRODUCT



Data: Dept. of Commerce; CED.

• **GNP Growth**—The first chart presents one of these growth measurements—and raises an important question about just where we are right now on the growth line. It shows that gross national product, measured in constant prices, was growing steadily at an annual average rate of 2.9% from 1909 to 1957. But in the postwar period, from 1947 to mid-1959, the climb has been steeper: GNP has grown at a 3.6%-a-year clip.

REAL GROSS NATIONAL PRODUCT

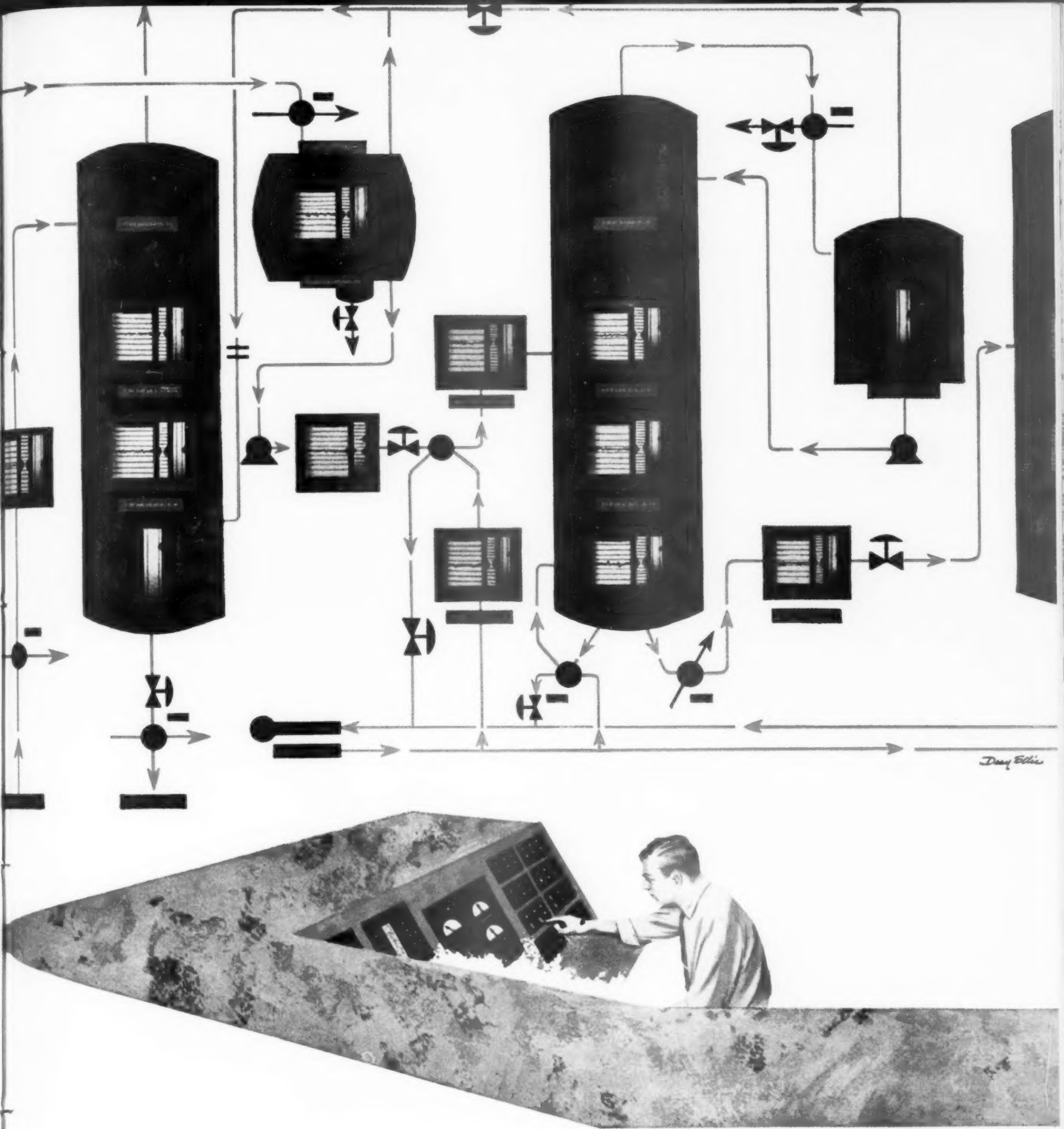


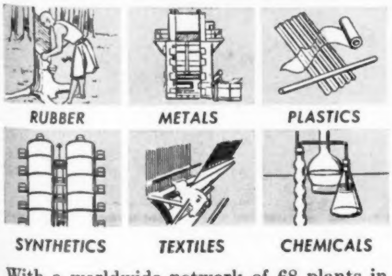
Data: Dept. of Commerce; CED.

If you take shorter periods within the postwar period, in the chart above you can get some startlingly different results. From 1947 to early 1953, the GNP growth rate averaged almost 5%. From mid-1953 to the first quarter of 1958, it was only a little better than 1%. But whatever political hay can be made of such short-term rates, they hardly tell you anything about real, underlying growth.

The question these charts raise is this: Are we now back on the U.S. economy's long-term 3% growth trend—the trend marked out by the long 1909-

(GROWTH REPORT continues on page 65)





1957 line? Or have we started out on a new, postwar growth trend that is closer to 4%? (If 1960 turns out to be a year of $510-billion GNP, we'll be back, at least for now, on this postwar 4% trend.)

• **Productivity Jump**—This postwar step-up in total GNP has not come about because the size of the work force has suddenly started to swell at a faster rate. Since 1947 the labor force has been growing at just about the same clip it has been growing for decades—at an average annual rate of 1.3%.

The faster rate of postwar GNP growth has been due to something else—an apparently faster increase in output per worker Since 1909, productivity (measured as output per man-hour worked) has been edging up steadily at a 2.4% rate each year. Since 1947, the increase has speeded up to a 3½% rate (BW—Jan.16'60,p22).

• **Income**—Some economists have another measure of economic growth that puts a slightly different light on the picture. These economists consider that the most important measure of economic growth is the rate at which living standards are rising, and that the best measure of living standards is per capita real income after taxes.

PER CAPITA INCOME AFTER TAXES

Data: Dept. of Commerce; CED.

In the postwar period, from 1947 through 1959, per capita disposable income has been gaining at a 2% rate per year. But it's below the 3½% postwar annual rise in output per man-hour worked. The chief reason for this relative lag in per capita income: The total U. S. population has been growing faster than man-hours of labor.

• **Disagreeing Doctors**—All these measures of growth, however, don't "speak for themselves." Different interpreters, staring at the same trends in overall GNP, come out with quite different conclusions. You can line some of them up like this:

• Dr. A: "U. S. economic growth, over the long run, averages 3% a year. We're now just about back on that 3% trend."

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• Prof. B: "Quite the contrary. The shift, since the war, to a growth trend closer to 4% per year constitutes a major breakthrough."

• Sen. C: "That's just where you're dead wrong. The 4% growth trend during the first decade after World War II was exceptional and can't be sustained. In fact, since 1956 the growth rate has been side-slipping. It's now more like 2½% per year."

Some would blame this alleged side-slip on excessively restrictive monetary and fiscal policies on the part of government. Others would say it's due to the necessity of ending the inflationary movement that went along with faster growth. Still others would argue that an "affluent" society—what used to be called a mature economy—was bound to suffer a slowdown in its rate of growth.

• **Raised Sights**—Other interpreters, looking at the same growth statistics, reach a more expansive conclusion.

Their view: Postwar experience suggests the feasibility of a 5% growth rate for the U.S.

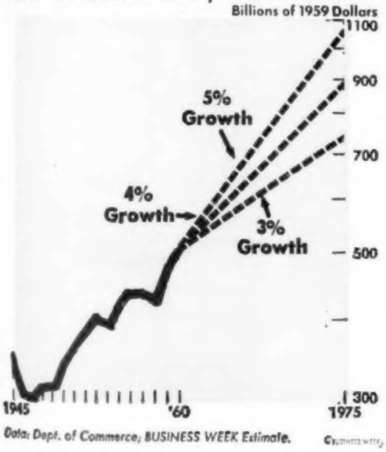
This is the conclusion of the Rockefeller Brothers Fund report. Indeed, New York's Gov. Nelson Rockefeller recently argued that a 6% growth rate—one that would approximately match the Soviet rate of growth—is feasible.

• **How Far?**—It makes an enormous difference to the future of the U.S. which of these conflicting growth rates is the valid one for forecasting. The varying results, moving just from a 3% to a 5% growth rate, as the chart below shows, range all the way from $750-billion GNP in 1975 to a $1,050-billion GNP in that year.

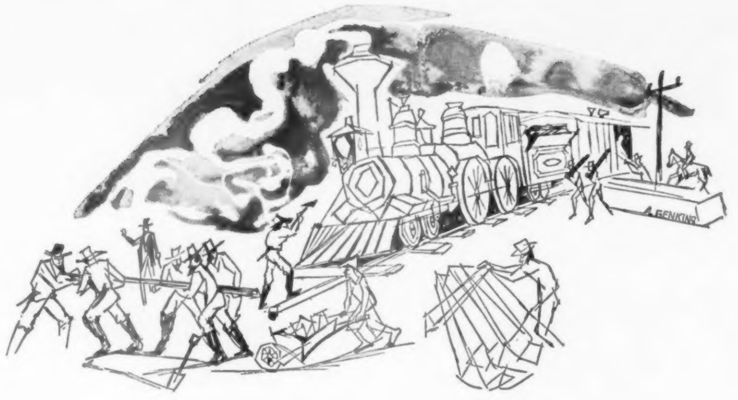
But obviously you don't achieve a growth rate just by interpreting past data and setting up some figure as the growth rate you think desirable for the long future. You must take into account the forces affecting growth.

What are the real forces that determine the growth of the economy? And to what extent can they be altered?

GNP PROJECTIONS, 1960 TO 1975



Data: Dept. of Commerce; BUSINESS WEEK Estimate.



What Makes the U. S. Grow?

If it's difficult to find a measure of growth that could provide a foolproof forecast of the future, the riddle of what makes an economy grow is even tougher to solve.

Scraps of various theories of economic growth have been littering our libraries for hundreds of years. But, after the middle of the Nineteenth Century, economics proper abandoned the effort to understand growth, and instead tried to turn economics into a neat, precise, deductive science like Newtonian physics. Growth was too messy—too full of historical, sociological, technological, "institutional" complexities.

• **Basic Causes**—The postwar goldrush into the growth field throughout the world started theories of growth multiplying again. The rush was spurred on by political factors—first, the drive of the poor nations for economic development; and second, the great thrust forward of the Soviet Union. Its result has been the rediscovery of what the earlier writers, historians, sociologists, and the classical economists had already learned.

This was that there are two basic sets of causes of growth:

• One is the complex of cultural factors—including science, technology, population changes, religion, politics, social attitudes, class structure, and the intellectual and moral qualities of men: their skills, their imaginations, their drive, their courage.

• The other is a set of economic factors—especially the possibility of accumulating capital and using it to make a profit.

• **Role of Investment**—These two sets of factors, cultural and economic, must conjoin if growth is to occur. The two come together in the act of investment; that is the genetic moment for economic growth.

What's more, there is a close and direct link between the rate of investment and the rate of economic growth. In the United Kingdom between 1950 and 1957, for example, gross investment stood at something over 13% of GNP, and the annual rate of increase in GNP was below 3%. In Mexico, the U.S., France, and Belgium, gross investment ran higher—between 16% and 17% of GNP; and in these countries GNP climbed at rates varying from just over 3% to just over 5%.

In Japan, Venezuela, and the U.S.S.R., on the other hand, gross investment reached such expansive rates as 25% to 29% of GNP. And the growth of GNP speeded up accordingly, ranging up to an 8% rate in Japan and above 9% in Venezuela.

Autonomous Investment

But if it's investment that plays the basic role in growth, what causes investment to rise—or to sink?

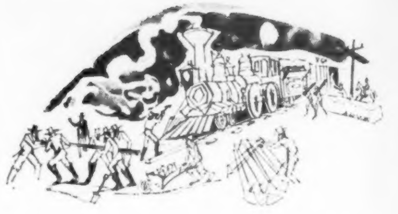
Broadly, in considering what spurs on the investment process, you can split investment into two categories—**autonomous** investment and **induced** investment—though the Dept. of Commerce doesn't do it that way.

Economists themselves use both terms without much precision. What they mean, though, is approximately this:

• Investment is autonomous when it creates its own demand.

• Investment is induced when it represents a response to a pre-existing demand that forces producers to increase capacity.

Another way of putting the difference would be to say that **autonomous investment results primarily from non-economic causes, from forces outside of the economic system itself**—that is, from the action of the various cultural forces that help to bring about economic growth. **Induced investment, on the other hand, results primarily from economic factors**—from changes in business activity, from the relationship of



costs, prices, interest rates, profit margins, the ratios between sales and capacity, and other forces within the economic system itself.

• **What's Autonomous**—Autonomous investment comes from:

- The discovery of new techniques of production, such as the assembly line; this cuts production costs.
- The development of new products, such as the automobile; this creates new markets.
- The development of new resources, such as petroleum—a process usually stimulated by some technological advance.
- Population growth and migragration, which stimulate investment in housing and public utilities.
- War—hot or cold—which necessitates expansion of plant and equipment to produce defense goods.

The last two factors may seem to come close to induced investment, or response to existing demand. But, essentially, they are non-economic factors—"cultural" forces outside of the operations of the economic system itself—and so are grouped with autonomous investment.

As growth producers, however, both population increase and military requirements are uncertain in their effect. Population increase may create a "need"—which is not necessarily the same as "demand" in the economic sense—for investment in homes, schools, sewers. But it may reduce investment in areas that cause productivity to quicken its pace—and may even reduce total investment by boosting consumption requirements too high. (This is the plight of underdeveloped countries.)

By the same token, certain military expenditures may increase growth—growth in electronic research, for example. Others may simply divert savings into stagnant channels, such as provision of housing for troops.

New Way to Grow

The most important element in autonomous investment (whether it results from civilian or military effort) is the growth of technological knowledge which culminates in new products, new processes, new resources—in other words, innovational investment.

In the past, the U.S. has had three

(GROWTH REPORT continues on page 73)

Another new development using

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Now gas comes home through pipe of Geon

The pipe in this natural gas distribution system is made of Geon rigid vinyl. Years from now it will be feeding gas to homes just as efficiently as the day after installation. This pipe stays smooth inside and out because it is not affected by the corrosive influences that affect ordinary pipe. No problems from salt water, chemicals, acid or alkaline soils, or galvanic corrosion.

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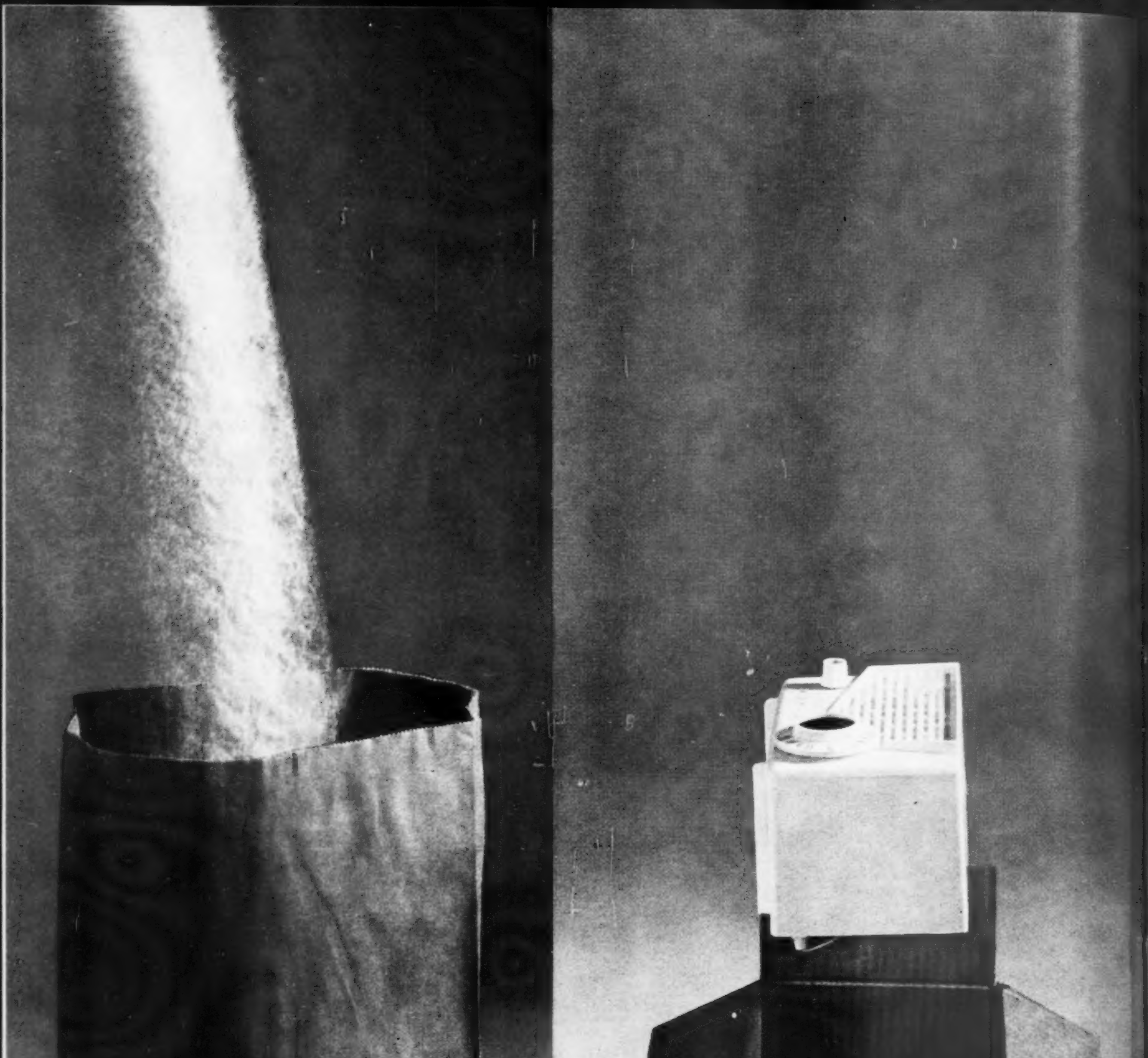

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great innovational pushes that have sent the economy climbing upward—each lasting about half a century.

The first big push—based on cotton textiles, iron, and steam power—lasted from the end of the Revolutionary War until the 1840s. Then came the second push—based on the building of the railroads, and on steel—lasting until close to the end of the 1890s. The third thrust—powered by electricity and the automobile—got under way around the turn of the century, probably ended a few years ago.

• **Now the Fourth**—It's going to be a lot harder, though, to fasten a label on the new innovational push that we have been experiencing since the end of World War II. That's because it has not been based on any one or two innovations that provide a convenient tag, but upon a whole flood of them.

These postwar innovations owe their origin to major scientific progress in nuclear and solid-state physics, organic and inorganic chemistry, electronics, engineering, the earth sciences, the biological sciences, mathematics. The important scientific work that led to breakthroughs—and innovations—in those fields stretched back through the war years and on through the years of supposed stagnation in the 1930s (when the work of scientists such as Einstein, Lawrence, Fermi, and Meitner was far from stagnating).

What will this new epoch be called? It's clearly an understatement to call it the atomic age, as people did at the end of the war. It's too narrow to call it the age of automation or cybernetics, as Norbert Weiner did. And it's much more than the space age.

• **Multi-Product**—Nor is it only the big, sensational things—the headline-grabbers such as atomic reactors, hydrogen bombs, electronic computers, jet transport planes, atomic submarines, earth satellites—that have issued forth from this new innovational push.

The list is almost endless of new products that have staged a fast growth in the postwar period.

The new products and new services listed below are just some of the fastest growers in the 1948-58 decade. You could go on and on—through the roster of 15% to 20% growers (diesel locomotives, food disposal units, automatic transmissions, trailer coaches, frozen foods), and the 10% to 15% class (home freezers, sulfa drugs, dishwashers, transparent film for packaging, synthetic ammonia, and so on). The impact of product and process innovation is obvious throughout the roll call.

And back of that is the impact of science, of research and development.

• **Life Cycles**—There's another side to this picture, too. You find it in the list of products that have shown a declining trend through the postwar period. Lumped together in this group are sheepskins, local transit (in passengers carried), lead, cast iron boilers, railroad passenger cars, anthracite coal, radiators and convectors, steam locomotives, tin, brick, woolen goods, tractor moldboard plows, work shirts, domestic heating stoves, creamery

butter, black blasting powder—and other victims of technological change.

Many of these represented innovations in their day. And like them, each of the multitude of postwar innovations has its own life to live. Some will have a long and pretty steady period of expansion before they taper off. Others shoot up like a rocket, hit a ceiling, then perhaps drop back. Still others will keep booming upward for a long time.

This falling off of obsolescent products as technology changes is the reverse side of the innovation on which Joseph Schumpeter built his theory of economic growth and business cycles. It's what he called "creative destruction"—creative, because the ultimate effect of innovation is growth, not stagnation; capitalism is a system of economic change that "not only never is but never can be stationary."

• **Planning for Innovation**—So, in the postwar period, these victims of technological change and creative destruction have merely smoothed the path for the multitude of innovations—new products and new processes—that have had a mighty role in pushing the nation's economy upward at a rapid pace.

This process of growth via technological progress and innovation, of course, is nothing new—it has been present in all of the country's past innovational pushes. **What's new is the multiplication of innovations—and the widespread recognition and systematic application by industry of the notion that new products and new processes open up a broad highway to an industry's, and a company's growth.**

Instead of leaving innovation more or less to chance, as was largely the case in the earlier periods, **many industries are deliberately setting out to plan far ahead for the introduction, year after year, of profitable new products** that will keep the sales curve soaring. Not all industries, though, are jumping as yet into this sort of systematized innovation.

• **Research Spur**—Just as breakthroughs in nuclear physics, chemistry, electronics spurred the immediate postwar splurge of innovation, so **research keeps the stream of new products flowing endlessly.** Indeed, if we want a tag for this postwar innovational push, research might provide as good a label as any.

For research, spawning a multitude of innovations, has become the motive

Products That Pace U.S. Growth

The push behind U.S. postwar growth has come, not from one or two big developments — as in the age of railroad building or the spread of electric utilities — but from a whole flood of new products spawned by industrial research. Here are just some of the fastest-growing new products and new services that have helped push the economy upward at a rapid pace in the 1948-1958 decade:

Growth Rate: 40% per year — or more

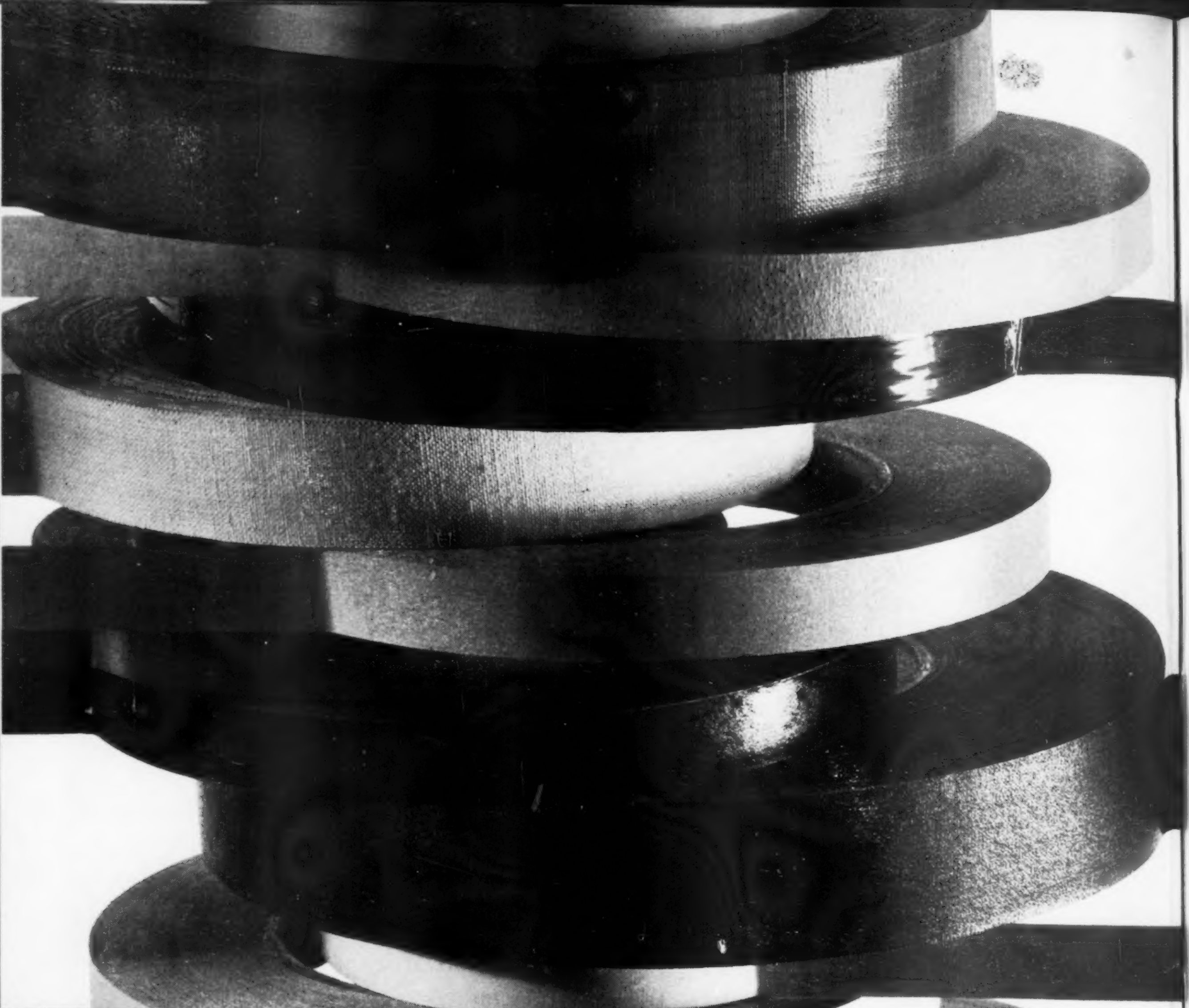
- Transistors
- Titanium sponge
- Power steering
- Power brakes
- Antibiotics
- Television sets
- Polyethylene
- Styrene plastics and resins
- Vitamins
- Helicopters (nonmilitary)
- Synthetic rubber
- Butadiene
- Synthetic detergents

Growth Rate: 30% to 40% per year

- TV broadcasting stations
- Air ton-miles flown
- Synthetic fibers (except rayon)
- Electric driers
- Automatic coffee makers
- Argon
- Room air conditioners
- Tape recorders
- Shavers
- Pentaerythritol

Growth Rate: 20% to 30% per year

- Tractors
- Polyvinyl resins
- Air passenger-miles flown
- Pickup hay balers
- Electric blankets
- Helium
- Rayon and nylon tire cord
- DDT
- Power lawn mowers
- Synthetic ammonium sulphate



power of economic growth, as steam, steel, railroads, electricity, and autos provided that power in the past. It is the big force now spurring on innovational investment—that keystone of the structure of autonomous investment which is the foundation of long-term economic growth.

• **Combination**—The results have been showing up in a number of industries, and BUSINESS WEEK has been telling many of these individual stories over the years, in special reports on jets, electronic computers, plastics, and so on.

It's the broad coming together of all these separate streams of progress in different industries that, in our economy, produces national economic growth. Growth, in our system, is the combined result of a great number of individual discoveries and gambles.

Whatever the future may hold, the fact is that this uncentralized, individual approach has given the U.S. by far the highest standard of living, the biggest economy in the world.

Induced Investment

If autonomous investment—the kind that results primarily from cultural forces outside of the economic system, and that takes its most powerful form in spawning innovations—is the chief cause of long-term growth, the other category of investment, induced investment, has a different role.

Induced investment—generated by forces within the economic system and representing a response to changes in demand for existing products—is the prime cause of short-term instability.

Upswings in induced investment produce booms—and, commonly, some degree of inflation. Downswings in induced investment produce recession, unemployment—and in the past, deflation, but more recently just a slower rate of creeping inflation.

• **Dangers**—To be sure, if a fall in induced investment is great enough to drag down national income for a lengthy period, and to damage public and business confidence, it might have a more disastrous effect. It might contract the resources, human and financial, that otherwise would have gone into autonomous investment, or into the scientific and technological work that underlies autonomous investment.

If a depression, for example, caused industries to slash their research programs to nothing, and was deep enough to starve colleges and universities both for funds and students, the economic loss to the nation might be long-lived. The "might" is a necessary qualification, however, for it's not quite clear that even the miserable Great Depression of the 1930s seriously retarded the long-term growth of the U.S. It probably did hold things back to some extent—but you can't really find the evidence for that in the long-term growth statistics (chart, page 62).

• **And Gains**—On the other hand, it's possible that relatively moderate dips in investment, which result in brief and moderate recessions, actually stimulate long-term growth. The reason is that recessions force business to step up its efficiency and encourage it to go in for innovations, either to cut costs or to create new markets.

To take just one example, Warner Bros. Pictures didn't launch the talking movie because it was overloaded with cash, but because it was in desperate financial straits.

Of course, every innovation doesn't automatically give a company an antidote for sinking sales of existing products. Cinerama, Smell-O-Vision, and AromaRama don't appear to be capable of producing growing audiences for movie houses today—though there's some hint that good stories may.

• **Intertwined**—Though induced investment has its own role, in the real world you can't neatly disentangle induced from autonomous investment. When a company needs extra capacity because its sales are increasing, it doesn't try to build a plant exactly like the last one (or the first one) that it built. It puts up the most efficient and modern plant it can get together, throwing in all the technological advances that have come along in the meantime.

So the question is this: In the decision to build the new plant, how big a role did these new technological gadgets play, how big a push came from the greater demand for the company's products?

Or was it either of those two considerations that really led to the decision? Was it rather the fact that the company had made big profits on past sales, had a lot of cash in the till, and saw no reason to pay out the cash to the stockholders instead of putting it into expansion? Or was it perhaps some executive's hunch that business was going to be enormous in a certain line—and his readiness to gamble on that hunch so he would have the capacity to grab off a big hunk of that business before any of his competitors got to it?

• **Cause of the Swings**—Though economists have tagged the swings in induced investment as the prime cause of short-term ups and downs of the economy, they haven't been able to get a sure line on what causes the swings in investment. But economists don't intend to give up in their effort to uncover the causes of cyclical swings in investment. Basically, their ideas divide into two categories:

• **"Accelerator" theories.** These are based on the idea that a boost in demand for consumer goods works like an accelerator on the demand for investment goods. The accelerator effect varies, though, according to the level of business activity. If industry is operating far from capacity—the effect will be small. But if industry is close to its preferred capacity rate or anticipates a crowding of its capacity ceiling—a 4% boost in consumer demand might mean as much as a tenfold jump in investment plans. The action of the accelerator also depends on business expectations—it will take a while before the new capacity comes on stream, and you have to be sure the market will still be there.

• **Financial theories.** These make investment depend chiefly on profits and on the availability and cost of capital.

Making investment depend on past profits is the older theory—it was the view held, for instance, by David Ricardo in the early Nineteenth Century. The accelerator idea came into general use with J. M. Keynes' work in the 1930s. More recently, many economists have been getting back to the older notion that investment was primarily a function of past profits—and of profit expectations as well.

Industry may make decisions to modernize when it has no capacity problem, as in 1958 (BW—Sep.27'57,p74). Recovery in capital spending in that recession year, well before industry was operating at or near preferred capacity rates, lends support to the financial rather than the accelerator theory. But the two ideas don't necessarily rule each other out.

• **Volatile**—Whatever the cause of the swings, however, 1958 and the two earlier postwar recessions have shown that investment is still a volatile element in our economy. Some degree of volatility appears inescapable in an economy in which investment decisions are made by individual businessmen rather than by a central planning authority. For in our economy, the businessman plays a top role in bringing together and setting in motion the forces that make for growth.

The booms and recessions that result from this volatility of investment are the price of a free economy. But government, of course, has come to play a bigger part in damping down the cyclical swings through monetary and fiscal policies, and through the built-in stabilizers.

Can We Get Balanced Growth?

In the short run, then, financial and economic factors—profits, cost and availability of capital, sales-capacity ratios—determine swings in investment and the rate of growth. In the long run, the major forces determining growth are the cultural factors—science, technological progress, population trends, changes in social institutions.

The remaining job—and it's an incredibly difficult one—is to integrate the short run and the long run, the business cycle and the long-term growth trend.

For the economists, this means working out a unified growth theory. For the country, it points to the possibility of a unified set of policies that could promote growth without so many unsettling short-term ups and downs.

• **Beginning—**The economists, thanks to pioneering work by Oxford's Sir Roy Harrod and Johns Hopkins' Evsey Domar, are moving toward such an integrated theory. It starts with the concept that the economy has, in any period of its history, a maximum or "natural" growth rate which is determined by increases in the labor force and by technological progress.

That merely says that an economy can increase its real output (assuming that it is already functioning at full employment) only by adding more hands or by improving knowledge and techniques.

• **Too Much or Too Little—**But there's nothing that guarantees that people or businesses will actually save and invest just the sums required to produce economic growth at this maximum rate. They may try to save and invest too little or too much.

Paradoxically, if they invest too much—in other words, try to achieve a growth rate beyond the economy's natural potential—that will cause economic stagnation. That's because the other face of excess saving and investment is too little consumption, and idle capacity. And the spread of idle capacity brings a fall in investment and an increase in unemployment.

If planned saving is inadequate, the economy appears boomy. Existing plant and equipment are used intensively, and profits are high. But the price trend is inflationary, because people spend too much and there isn't enough capacity to produce all the public wants.

• **Remedies—**Either way, it takes a dose of the opposite medicine to get the economy back on the track of its maximum or natural growth rate. If consumption is too high, the rate of saving would have to be stepped up, to free more resources for production of capital goods. As saving and investment climbed back toward the desired rate, inflationary pressures would weaken and disappear—because the increased saving would be a curb on consumption, and at the same time productive capacity would be growing.

If there's too much saving and too little consumption, with apparent overcapacity and a drag on employment and income, the aim would be to get people to spend more, and to reduce the over-all saving rate.

Naturally, the ideal goal would be a steady balance between consumption on one side, and saving and investment on the other, that would permit the economy to grow at its maximum potential rate—the rate determined by expanding technology and our growing labor force—with neither inflation nor unemployment.

But a quasi-free economy isn't likely to strike that exact balance consistently, even with the government attempting to offset the shifts in demand and in saving and investment. Those shifts around a balance point constitute the familiar mechanism of the business cycle.

• **Chronic Case?—**Much less familiar—but perhaps even more important—is another question. That is whether the real trouble with the U. S. economy is that it has become chronically unbalanced on either one side or the other.

Is it, for example, prevented from attaining its maximum growth rate by a chronic bias toward undersaving, overconsumption, and inflation? This would curb growth partly because inadequate savings mean inadequate investment, partly because inflation misdirects funds into the wrong channels—into such things as land speculation and bidding up prices of equities, instead of productive investment. This is the position taken by many conservative economists, and by such men as the Federal Reserve's William McC. Martin, Jr.

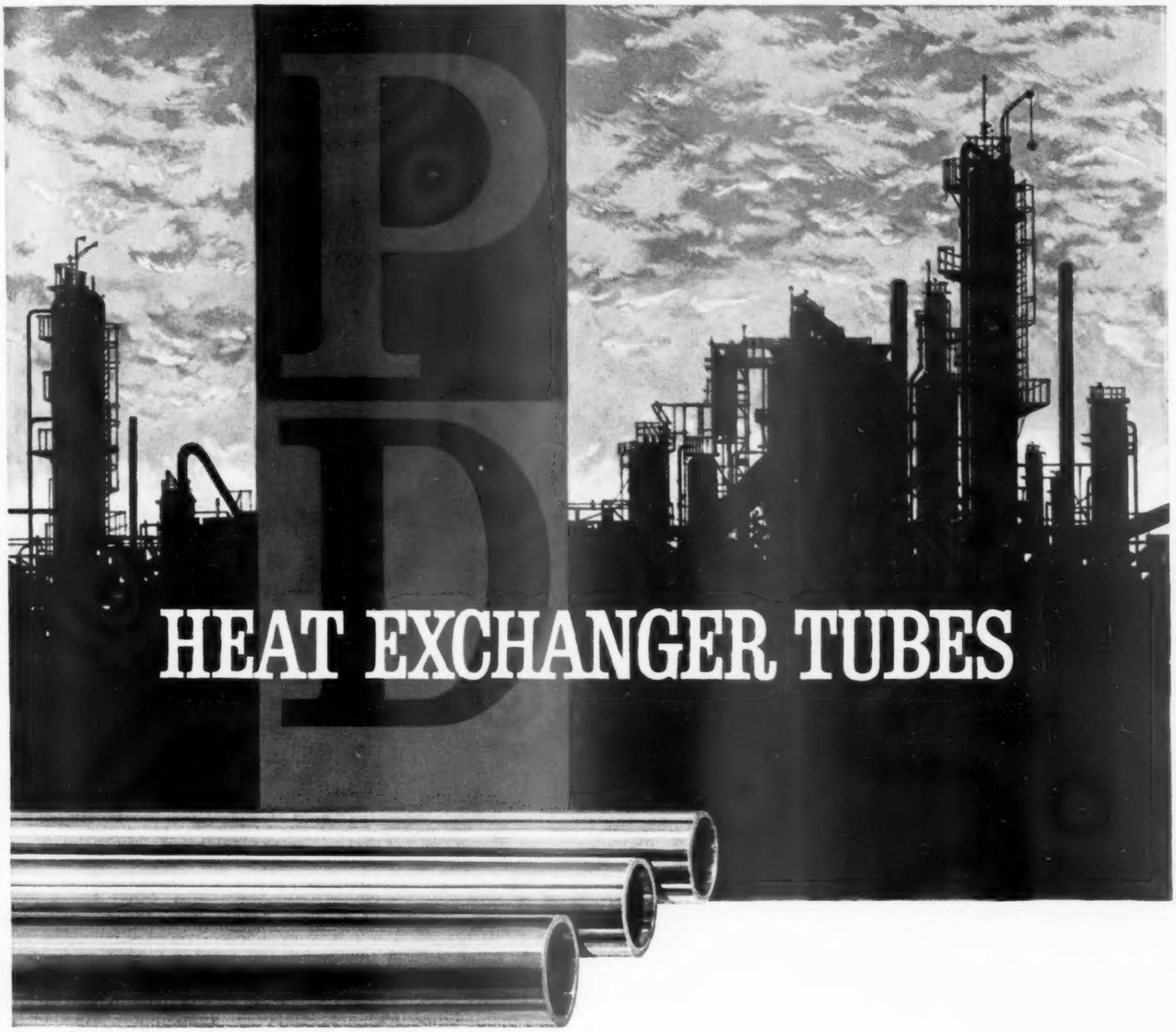
Or does our basic economic mechanism have a chronic set toward oversaving and too low a rate of income generation? Early in the 1957-58 recession, Harvard's Arthur Smithies summed up that case by saying: "The basic factor in the current recession is that the economy generates capacity faster than demand. Unless we have some powerful external stimulus as we had at the end of the war or during the Korean War, we tend to generate overcapacity. It's a persistent tendency of our economy."

Smithies' view revives a position first developed by Harvard's Alvin Hansen in the 1930s—that a "mature" economy like that of the U. S. suffers from a dearth of investment opportunities, seeks to oversave, and is therefore chronically underemployed.

• **Conflicting Evidence—**You can find plausible evidence in U. S. postwar experience to support either case. We have had chronic creeping inflation—which supports the overconsumption, undersaving and underinvestment line. On the other hand, we have had—in recent years at least—a higher unemployment rate than during the earlier postwar years, and a tendency to generate overcapacity and to slip into fairly frequent recessions. This backs up the underconsumption, oversaving school.

Can both views be partly right? Or is it perhaps some other factor that has been disturbing the economy, causing us to have creeping inflation simultaneously with underconsumption, tendencies to a higher unemployment rate and to overcapacity—and slow growth?

• **Rigidity—**One important possibility is that the economy has become far too rigid, immobile, and uncompetitive. One reason cited for this: that the growing power of big labor and big business have resulted both in creeping inflation (which the Federal Reserve has sought to check) and in underemployment of human and material resources, except in the spurts sanctioned by the Fed during periods of recovery from recession. An-


HEAT EXCHANGER TUBES

other straitjacket comes from farm subsidies aimed at keeping up prices of farm products—and from other subsidies, too.

These straitjackets might be loosened up by antitrust action, by new farm and labor legislation, by greater foreign competition.

• **Who's the Villain?**—A second important possibility is that it's the federal government itself that is the real antigrowth villain. From this standpoint, government could be curbing growth, paradoxically, in two different ways:

• By refusing to consider a reduction in tax rates.

• By refusing—with tax rates frozen at present levels—to permit adequate expansion in government spending.

Conservative economists lean to the tax-cutting solution; liberal economists to boosts in spending for national security or welfare programs.

Many who are concerned primarily about the Soviet threat also lean to the second solution. Says Massachusetts Institute of Technology's W. W. Rostow: "It is quite accurate to identify the Soviet advantage over the U. S. as consisting of a more stable percentage allocation to military and foreign policy sectors."

But obviously, if a continuously rising budget is not considered necessary to meet military requirements and national welfare goals, then the case for tax reduction as a growth stimulant would be the more powerful.

• **Cutting the Knot**—Many economists these days are moving to the conclusion that if we want faster growth, we've got to end the stalemate over U. S. fiscal policy, and choose one or the other of these two courses. Either tax rates will have to come down, to give more scope to the growth of private spending—or government spending will have to grow. Obviously, also, we could hit on some combination of the two.

The choice involves economics; but it's also—perhaps even more—a matter of political and social preference, since either choice would promote growth in one way or another.

The policy choice that emerges will depend on:

• External political pressures, especially Soviet-American relations, Communist Chinese moves, the problems of underdeveloped nations—in Africa and Latin America as well as in Asia. These pressures will affect the size and scope of many government programs, in defense, foreign aid, atomic energy, space exploration, and other lines.

• Internal political pressures—for welfare programs (social security, urban redevelopment, agriculture, health, education, and so on) or for tax reduction (putting greater reliance on the private economy to solve growth and welfare problems). Even if the second push should be stronger, there would still be tough infighting over the kind of tax reduction needed under existing conditions—whether to aim it primarily at stimulating consumption or stimulating saving and investment.

• **Hard Steering**—In any case, ideology and personal or group interests are bound to affect the choice of growth policies finally arrived at. But so will the character and wisdom of political leaders who will have the task of developing growth policies to serve the interests of the nation as a whole, not just the aims of certain groups.

Can the American political process be trusted to work out solutions to these highly complex economic choices? It won't be easy.

But the U. S. has for more than a decade been demonstrating that it can deal with long-range problems with more patience and consistency than its opponents or its friends suspected.

Even Pres. Roosevelt apparently thought that U. S. public opinion would not permit U. S. troops to remain in Europe long after World War II; yet opinion did permit this. At the war's end, few could foresee the Marshall Plan and other long-lasting programs to rebuild the world's shattered economy and to check the spread of Communism in areas far from the U. S.; but they happened. And the U. S. carried through these programs without basic change in its political and economic system.

The growth problem, too—crucial to the long-run survival of freedom in a troubled world—also seems capable of solution in the typical undoctrinaire, pragmatic American manner.

Key to the Future

The great thing the U. S. will have working for it will be the swift scientific and technological progress of our time—and a rising tide of autonomous investment resulting from U. S. industry's new principle and practice of programed innovation, of creating a multiple flow of planned new products out of research, in a new and powerful extension of capitalism's growth process.

• **Technology and Output**—How important this technological advance is you can see by looking at the past impact of improving technology on output. MIT's Robert Solow has estimated

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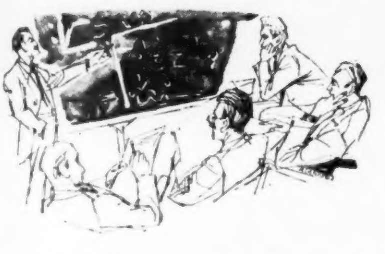

that of the U. S. increase in output per man-hour from 1909 to 1949, not more than 13% was due to increase in capital; 87% or more was due to technological progress.

In other words, it wasn't just more machinery in back of every worker, but an unknown combination of better machinery and technology, better management, and greater skills on the part of workers, that sent U. S. output soaring in the past half century.

• **Rising Curve**—To speed up technological progress, the R&D curve keeps rising (BW—Dec.26'59,p50). In 1928, U.S. industry spent less than $100-million on R&D. By 1953-54, over-all U.S. research spending had jumped to more than $5-billion a year. Now it's $11-billion. What's more, research spending by private industry (excluding government funds) has tripled in the last decade, as more and more companies have turned to R&D as a competitive weapon.

By 1969, total U.S. research spending is variously put at anywhere from $22-billion to $35-billion—with private industry, rather than government, accounting for most of the rise.

Of course, you can't jump to any specific conclusion about the speedup in the growth rate from this. Results depend on the quality more than the quantity of research done. And the volume of capital investment resulting from a particular volume of R&D is unpredictable. Some innovations multiply capital spending—as railroads, for example, led to huge investments in rail lines, bridges, locomotives, and cars. Other innovations are capital-saving. High-speed tape-controlled machine tools may—by reducing inventory needs and boosting productivity—actually reduce total investment in machine tools.

The U. S., too, with a heavier share of investment going to maintain and improve existing equipment, may get smaller returns in terms of output and growth rate than nations like the Soviet Union, which are still industrializing.

• **Systematized Innovation**—What does give stepped-up R&D its strong growth promise for the future is the way industry is directing it toward planned and systematized innovation—thus assuring that the postwar stream of new products will keep up its fast flow.

Not all research aims directly at new products, of course. The goal of American Telephone & Telegraph's big Bell Telephone Laboratories is rather to keep the parent company abreast of the latest scientific knowledge in all fields it's interested in. Yet the electronics patents developed by Bell Labs gave a forward push to a whole industry when Bell Labs had to release its right to them a few years ago.

You see the pattern of industry's new way of growing more clearly in two other big companies. E. I. du Pont de Nemours & Co. has 4,300 scientists and engineers working at its Experimental Station in Wilmington. The continuous supply of developmental results that flow out may not, as Pres. Crawford Greenewalt often points out, look big by themselves—but they combine to keep du Pont up with the leaders in its many lines. Similarly, General Electric's research, covering all the bases, means a steady flow of developments out of the business end of the pipeline each year, and assures GE that, even if somebody beats it to a particular discovery, it won't be left behind in the race.

• **Fastest Growers**—Some U. S. industries don't go all-out for this thinking. Among them are steel (which keeps pace largely because of the great demand for innovation by defense industries), and autos (which spends more on design than on R&D). But the industries that have grown fastest in recent years are almost invariably those that have organized research to give specific results.

The electronics industry—one of those boosting its R&D spending the fastest—is considered today to be on the brink of an explosive growth period. Defense industries in general are blooming because of concentrated research. The drug industry (BW—Jan.9'60,p90) is committed to constantly accelerating research as an essential competitive weapon. As for petrochemicals, its whole existence is so completely linked with systematizing of research that you can't separate the two.

• **Powerful Thrust**—With this new growth tool of systematized innovation, there's no reason why the U. S. should not do even better in the future than the past. The coming together in our time of new materials, new tools of measurement and observation, new calculating devices, new instruments of communication, new sources of power, and new ideas in every field is producing the most powerful thrust we have ever known.

Human Capital

Our problem is to harness that thrust—to use it to build up national welfare, solve our international problems.

But the Soviets are trying to harness the same kind of thrust for their own purposes. Which holds the winning cards in such a competition, a free society or a controlled one?

The University of Chicago's Theodore Schultz has stated the issue with dramatic clarity. In its investment in human resources and talents, he fears, the U.S.S.R. may be doing a better job than we are. He says:

"Herein lies the real possibility of the economy of the U.S.S.R. They are becoming exceedingly productive, despite the waste and inefficiency from their overcentralization. If I were to worry about the Russian economy—and I have seen it at first hand, and a good deal of it—it is in terms of the talents of the people that have risen—it is the creation of human capital that has taken place that is so extraordinary."

• **Investing in Talent**—But the needed human talents in this competition aren't just scientific and technological. They must include imagination, drive, organizing ability, insight and feel for the way economic history is moving, energy, and courage—and all this among broad groups in a society.

This brings the study of growth around full circle to where it began centuries ago: The growth and power of nations depend primarily upon the qualities of their people.

That puts the focus of a long-term growth program not just on our tax laws, or on plant and equipment spending, but on our schools and colleges and universities and laboratories, and all the other seedbeds of American talent. The need to attack the problem from that angle has been widely sensed. BUSINESS WEEK has been already dealing with it in special reports on education, brainpower, research.

• **Exciting—and Unpredictable**—A new experiment, a new setting of national goals and rebuilding of institutions is getting under way—confusedly, hesitantly, without full awareness of what's being tested or what the results will mean. If it succeeds, it will change the U. S.—and the world—as radically in the next half century as the world of 1960 has changed from that of 50 years ago. The prospects are exciting—and quite unpredictable.

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Soviets Take to Buying on Cuff

The capitalist practice of time payments is going over big with Russians, eager for goods but faced with high prices.

After years of denouncing installment buying as a capitalist trick to fleece the worker, the Soviet Union has introduced the practice with a flourish.

And it has already been declared a blood-red Communist success, despite the modest scale of the trial. Russians are flocking to stores to buy now, pay later (pictures).

The scheme was launched last Oct. 1 to cover a handful of goods. Since then, it has stimulated sales, reduced unwieldy inventories, and won praise from both customers and retailers.

• **Easy Credit**—Surprisingly, buying on time in Russia is about as simple as it is in the U.S. At the store, the prospective buyer produces a letter from his place of work, exhibits his identity papers, and plunks 20% down. As long as he doesn't commit more than half his income to time payments, his employer or trade union is required to issue the necessary document.

If the consumer pays for the item within a year, the service charge is 2%. If he pays off in six months, the assessment is only 1%. Technically, payments are not deducted from wages, but the effect is the same: They are collected at the place of employment on payday.

Among the first 20,000 to buy on credit at Moscow's GUM, the largest Soviet department store, there have been no defaulters. But if somebody should fail to pay up, the purchased item would not be repossessed, as would be the case in the U.S. At least for now, Russia considers credit payments a "moral" obligation.

• **Happier Consumers**—After only a few months of operation, it's too early to estimate the role installment buying ultimately will play in the Soviet effort to attain the worker's paradise. But this much is certain: One of capitalism's most prized institutions has been happily received by the Communists.

The adoption of the pay-later plan, coupled with other new Soviet developments, leads to speculation that the Russian consumer may be in for a better life. For years, he has had to stand patiently in queues, battle up to counters, and wait endlessly for such treasures as a reliable watch. But now he is beginning to be treated more like a paying customer.

• **Convenience**—Russia has embraced consumer credit for several reasons. Of-

RADIO-PHONOGRAPHS are one of the popular items whose sales have multiplied two to three times since installment buying. So far credit isn't granted on television sets.

MOTOR SCOOTERS are much in demand, but they may cost up to 5,000 rubles. Since this is five months' income for a semi-skilled worker, pay-later plan is a spur to sales.

ficially, the explanation is that the plan is strictly for "the convenience of the people." Dmitri N. Kurnin, Chief of Internal Trade for the Soviet Union's largest member state, the Russian Federation, told a BUSINESS WEEK reporter: "Our credit system started from the initiative of the people. It was natural development, not any special circumstances, that fixed the timing for the start."

However, say Western observers, it's more likely that the reasons were less idealistic, more down to earth. The Russians want something more to take home, partly because they have been getting a whiff, albeit slight, of the good life enjoyed by Americans and Western Europeans, partly because they have seen some of the results of their hard work literally shot to the moon. But the government-pegged prices of many consumer goods are too steep for a cash outlay.

And, as in many things Communist, there's also a propaganda angle. Premier Khrushchev wants to show the world that the Marxist economy can provide more than just bare necessities for the proletariat.

• **Sales Stimulant**—Primarily, though, the reason for installment buying is economic. The state-controlled economy overproduced certain items, such as hunting rifles and radios, and officials now have to find a way to move the goods.

In his "State of the Union" speech last week, Khrushchev claimed that production of consumer goods increased 10.3% instead of the planned 6.6%. Instead of cutting prices to encourage sales of the extra output, the government turned to a program of credit buying.

In addition, installment buying apparently fits into a new Soviet pattern of adapting some U.S. marketing methods. The trend is embryonic—but discernible. Among the U.S. styles that Soviet officials are imitating:

• Self-service stores. More than 10% of Russia's stores now let customers help themselves. Eventually, all shops will adopt the practice to some degree.

• Home delivery of food. Started two years ago, this service has slowly expanded in larger cities.

• A network of rental stores, to lend vacuum cleaners, sporting equipment, electric appliances.

• Food packaging in stores, when the manufacturer fails to package its own product.

Even diaper service is under consideration in Moscow. "If our sanitation authorities approve, we may give it a try," says trade official Kurnin.

• **Earlier Trial**—Not since the 1920s, when Russia was impoverished, has there been anything like today's installment buying. At that time, the Red government extended what it called "worker's credit" for purchases of clothing and furniture necessities. The system was abandoned after economic conditions improved somewhat.

About a year ago, the trade ministry quietly tried out a credit scheme in two Ukrainian cities, Stalino and Nikolaev (BW—Mar.14'59,p72). After a few months, it extended the trial to other cities. On Oct. 1, credit buying came to every city in the Russian Federation and many others throughout the Soviet Union. In Moscow, 46 stores now offer installment buying.

To finance the credit system, stores may turn to the State Bank for all the capital they require, right up to the unpaid 80%; if necessary, they pay 1% to 2% interest. GUM was able to finance half its program from its own reserves.

• **Catalogue**—The number of goods available on credit is limited. So far, the list consists of radio-phonographs, higher-priced radios, motorbikes, motor scooters, one make of sewing machine, outboard motors, wrist and pocket watches, clocks, accordians, some furs, cameras valued at more than 400 rubles, bicycles, hunting rifles costing more than 700 rubles, and clothing made of wood or silk-type fabrics. (Official dollar rate of exchange of four rubles to one dollar; the tourist rate is ten to one.) Most of these products are made as a sideline in factories turning out largely heavy equipment.

Notably absent from the list are items in short supply and high demand—among them television sets, refrigerators, washing machines, furniture.

"As time goes on," says Kurnin, "it is certain that the system will be extended to provide a more varied list of goods available on credit." Meantime, he appears delighted with the success so far. Of all non-edible goods sold in the Russian Federation since last October, 3.5% has been sold on credit.

• **Transfusion for Sales**—No over-all figures are available at present, but sales of the most popular items—radio-phonographs, motorbikes, and motor scooters—are said to have increased two to three times.

The rise in sales is good news indeed for retail officials. At a conference last July, party bigwigs told them that retail trade in the Russian Federation was below quota for the first half of 1959. Retailers were also blamed for putting low-quality goods on the market and for not keeping up with changes in popular demand. Now, with credit, the retailers have started things moving—and perhaps kept some heads from rolling.

Low-level retail officials are in no position to complain about the high prices the government sets. Prices run to 1,200 rubles for radio-phonographs, up to


harnessing the energy of the stars

5,000 rubles for motor scooters, between 1,200 and 2,200 rubles for TV sets and up to 900 rubles for washing machines.

To measure purchasing power, an unskilled worker's earnings, including bonuses, average 550 rubles a month. A semi-skilled worker makes about 1,000 rubles a month.

• **Khrushchev's Push**—While some pressure for more consumer goods has come from minor officials, the meaningful push has come from the top. When Nikita Khrushchev toured the Soviet Far East in autumn, he harped on the need for more consumer goods in several speeches—"and the wish alone is not enough," he said.

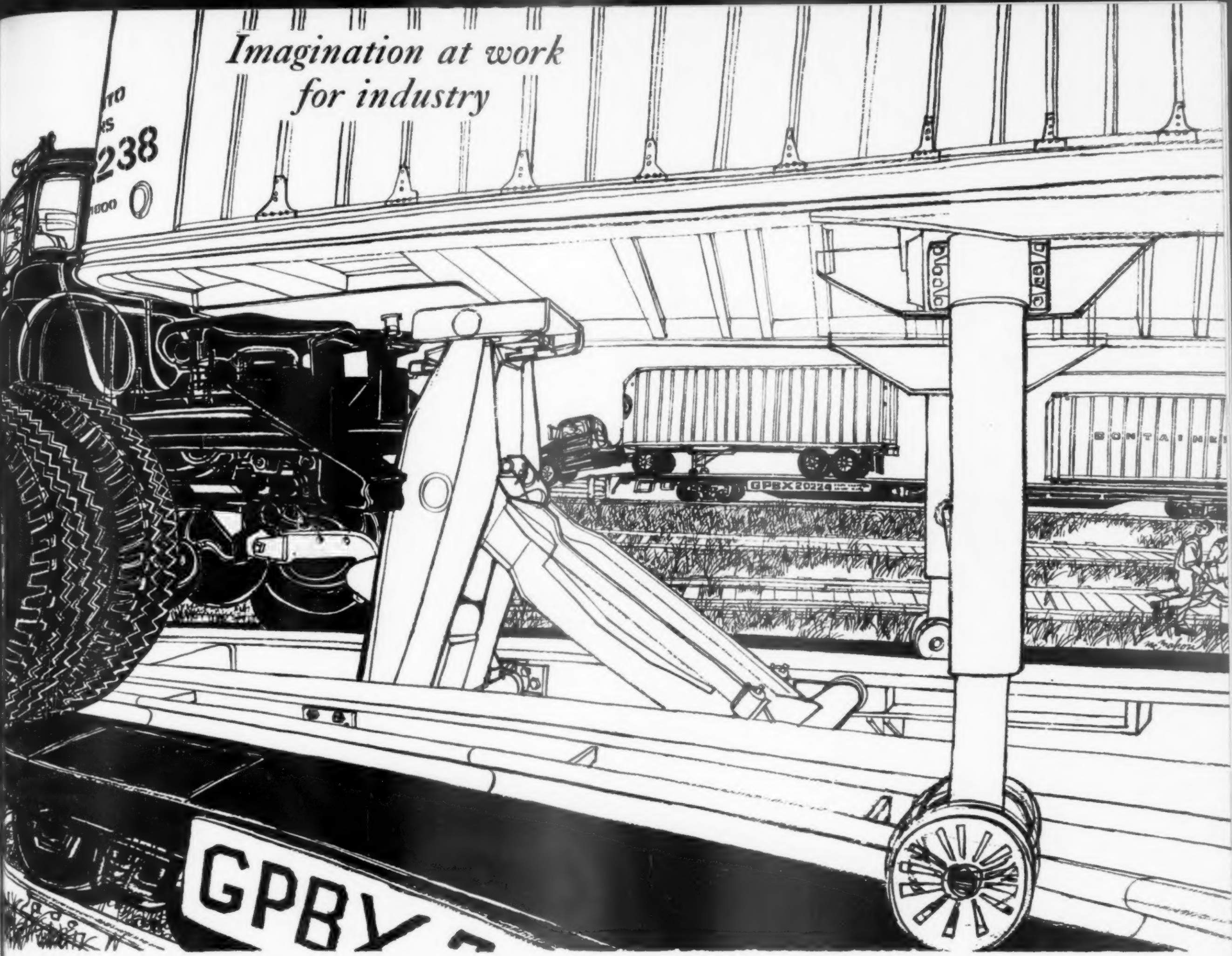
The chairman's remarks followed his visit to the U. S. and his two calls on the American exhibition at Sokolniki Park in Moscow. The exhibit drew more than 4-million Russians to see its displays on how Americans live, work, and play.

Khrushchev is also said to be aware that a disgruntled consumer is not always a good worker. But, although he publicly stated the need for more and better consumer goods, he did not order one kopek diverted from investment in heavy industry under Russia's ambitious Seven-Year Plan.

Shortly after Khrushchev returned to Moscow from his Far Eastern tour, the Soviet high command—the Communist Party's Central Committee and the U.S.S.R. Council of Ministers—published a decree calling for stepped-up production of consumer goods, in specific terms (vacuum cleaners, for instance, to reach 510,000 units annually by 1961 instead of the previously planned 246,000). The order could mean another 97 rubles worth of goods on the shelf for each of Russia's approximately 208-million people by the end of 1961.

• **TV on Time?**—But arrangements for financing such a spurt were left quite vague. Production is to increase by utilization of "local raw material resources and industrial scrap which are now insufficiently utilized. . . ." Also, more productivity is urged. The order instructed the State Bank to supply two-year credits to manufacturing enterprises that plan to extend or improve their production of consumer goods. But it didn't say how much.

If all that's promised comes true by 1961, there could be additions to the list of consumer goods now available on credit. "In about one more year, we may have enough television sets and refrigerators to put them on the credit list, too," says Vladimir Kameniov, manager of GUM. "At present, we just haven't got enough of them, and people are willing to pay cash well in advance of delivery to get these items." END



With General American's new piggyback car, there's a highway on rails ...for all trailers and containers!

Here is the new G-85—the piggyback car that takes *every-thing* . . . without modification! Auto carriers, furniture vans, *all* truck trailers, tanks, containers—everything that's legal on the highway—ride *safer*, *better*, *more economically* on it than in any other way.

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The savings this new car achieves may not be vital to you business, but the engineering skills and advanced plannin it represents *can* be invaluable to you.

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In Business Abroad

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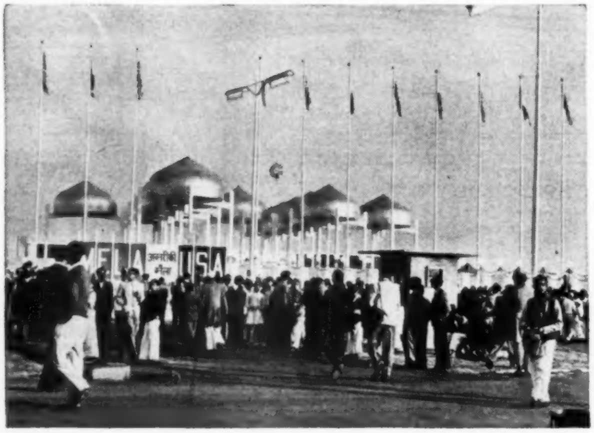

$2.5-Million U. S. Exhibit Wows Agriculture Fair at New Delhi

Since India's president, Rajendra Prasad, opened the World Agriculture Fair during Pres. Eisenhower's recent visit, 4-million people have thronged to the U. S. pavilion, Amriki Mela.

This is the largest and most frequented exhibit at the New Delhi exposition. **U. S. displays include everything from cows and cookies to a research reactor making isotopes.** Designed by Minoru Yamasaki, the pavilion and nearby accessories cost $2.5-million.

The four main exhibition buildings are surrounded by 32 precast concrete domes, set in a five-acre garden of lakes, fountains, and Indian flowers. According to Agriculture Secy. Ezra Taft Benson, it is the most complete agricultural exhibit yet attempted.

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Havana Hotels' Cut-Rate Offers Leave Most U.S. Tourists Cold

Cuba's attempts to revive its U. S. tourist trade during December and January have been fruitless so far.

The Castro government has been placing advertisements in New York and Miami newspapers offering half-rate fares on "Friendship Flights" to the island if the tourist will spend several nights in a Havana hotel. (Miami ads required two nights at first, later asked for three. New York ads specified four nights.)

Only one Havana hotel reports any noticeable increase in business. **The Havana Riviera, which added to the enticement with its own cut-rate package (three days, two nights for $14.95) had a full house of 700 guests in early January.**

Other hotels noted no increase and continued to run at record low levels, although rates have been reduced 20%. They are adopting package deals similar to the Riviera's but to little avail.

Havana's top hotelmen are really dejected—their losses are running into thousands monthly. The government will not permit them to fire excess labor nor will the regime extend any aid. **Many managers are now convinced, despite the half-rate airlift, that the planners in the Castro government are not interested in redeveloping the tourist trade, once a top dollar earner.**

• • •

British Auto Makers to Build Plants In Areas Where Workers Are Idle

British automobile manufacturers plan to increase their 1960 capital outlays 50% over 1959's figures.

The government has succeeded in persuading several of the biggest companies to build new plants in areas where unemployment is prevalent, not in the crowded London or Midlands region where most auto plants are now situated.

British Motor Corp., the largest auto maker, is expected to put up a tractor plant in Scotland and an auto assembly line in Wales, with government financial help. In both areas, thousands of coalminers are losing their jobs as the European coal glut forces the pits to close.

Ford of England is also believed to be planning new plants away from its base near London.

• • •

De Beers Combine Signs Agreement To Sell Diamonds Produced in Russia

The De Beers diamond combine, which markets 90% of the world's diamonds, kept a firm grip on its monopoly this week when it signed on as exclusive diamond sales agent for the Soviet Union.

Until now, trade observers speculated that Russia might try to undercut the London combine's stable price structure by dumping surplus diamonds on the world market.

Russian diamond production has been rising in recent months as new deposits in Siberia are exploited. Most of the stones found there are good for industrial uses. Gem diamonds are reported to have been found in the northern Urals and may be offered in Western markets.

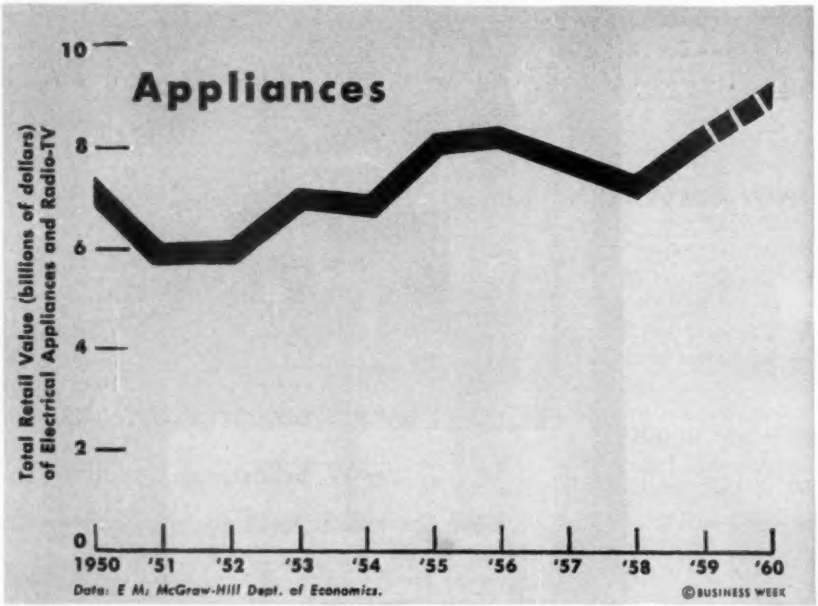
De Beers, which controls diamond prices by carefully calculated releases from syndicate stocks, gave no further details when it announced the agreement. The company now gets most of its diamonds from South Africa.

• • •

Export Help for Small Companies

Chicago's Assn. of Commerce & Industry this week disclosed that it is embarking on "Operation Export" to help the city's small and medium-sized manufacturers build foreign markets. Nucleus of the plan is a traveling "Chicago World Trade Center" exhibition. First stop: Vienna International Fair in September.

Record Sales in '59 Usher in More St



1 Sales last year set a record by a narrow margin

A YEAR AGO, after two years of a sales skid, appliance manufacturers were none too hopeful when they responded to the annual appliance survey compiled by Electrical Merchandising Week, a McGraw-Hill publication. For the first time since 1955, they underestimated sales for the coming year (table, above right). Then 1959 proceeded to break the best previous showing, made in 1956 (chart, above).

This year, replies to the survey from nearly every appliance manufacturer are more optimistic. Yet, as the tables on the facing page show, the industry doesn't expect to go soaring into the Sixties. In most categories, manufacturers expect to do better, but only slightly better.

• **Settled Down**—This conservatism on the heels of a recordbreaking sales year suggests that the industry is settling down to a less spectacular but more solid kind of business, in contrast to the performance of the Fifties.

Twice in the past decade, the industry enjoyed record sales sprees: in 1950, when the Korean War sent customers to the stores to snap up appliances before materials allocations should make them scarce, and in 1955-56, when customers went on an installment credit binge. But there were also many lean years.

• **Discounting**—The Fifties could go down in marketing history as the discount decade. The discounters' aggressive tactics moved a lot of stock but, especially in the cities, knocked out many old-time list-price dealers. In sum, these tactics accentuated the industry's tendency toward a roller-coaster sales curve.

Now the traditional dealers have moved down in price while the discount house, adding services and seeking stability, has pushed prices up. Thus, prices have begun to settle at a new lower level, and the industry counts on this order in the market to encourage steadier sales.

• **Backing the Dealer**—With more confidence than at any time in the last 10 years, appliance manufacturers are putting more sales push behind their regular dealers.

"Admittedly the manufacturer has done extremely well while the retailer's store has become a national bargain basement," says Leonard C. Truesdell, sales vice-president for Zenith Radio Corp. He says Zenith will spend 80% of its promotional budget on local advertising, point-of-purchase displays, and other aids to dealers. The company, he adds, will refuse to pay any share of cooperative local advertising cost where the pitch is on price-cutting.

Whirlpool Corp. will try to improve dealer profits by conducting store management clinics, with roving experts on store management to advise retailers. Norge Div. of Borg-Warner Corp. credits much of its good 1959 showing to its program of training retailers' sales forces. Kelvinator Div. of American Motors Corp., Hotpoint Div. of General Electric Co., and GE itself have also stepped up their dealer service programs.

Gibson Refrigerator Co., a division of Hupp Corp., is typical of the extreme view in relying on dealer incentives rather than national year-round advertising. Gibson makes much of periodical trips for dealers who excel in sales (BW—Sep.26'59,p109), claiming that a dealer can switch a customer's brand preference in seven out of 10 cases, if he chooses to try.

• **Steady New Market**—Stress on the regular dealers is in keeping with the industry's picture of the market of the 1960s: a market where price-cutting and inflated credit have lost their ability to hypo sales, a market where novelty and annual model change for the sake of change for the moment may have lost their charm.

With its success in retaining the same basic Rambler design for years, American Motors is dropping the policy of a new model each year for its Kelvinator Div. (BW—Jan.16'60,p92). Some manufacturers have also cooled on the loading of appliances with new gadgets that also boost the retail price. They see price resistance as a reason for the poor showing made by electronic ovens, electronic washers, and color television. It is thought that Westinghouse Electric Corp. for the same reason is holding off commercial introduction of its thermoelectric refrigerator.

Manufacturers pretty much agree that their market in the 1960s will be found in three major areas: replacement

Stable Appliance Market

2 1959 gains caught manufacturers by surprise, yet 1960 forecasts are still conservative

	MANUFACTURERS' 1959 SALES ESTIMATES		1959 SALES ACTUAL UNITS	1960 SALES ESTIMATED UNITS	1960 PERCENT CHANGE
Dishwashers	15.6%	too low	525,000	575,000	+ 9.5%
Disposers	15.8	too low	785,000	825,000	+ 5.1
Driers, Clothes	10.2	too low	1,425,000	1,505,000	+ 5.6
Freezers	8.3	too low	1,200,000	1,200,000	No Change
Ranges, Standard, Electric	27.3	too low	750,000	950,000	+ 2.2
Ranges, Built-in, Electric	10.8	too low	930,000	800,000	+ 6.7
Refrigerators	12.8	too low	3,750,000	3,800,000	+ 1.3
Washers, Automatic	8.5	too low	3,015,000	3,195,000	+ 5.9
Washers, Conventional	19.6	too low	995,000	895,000	−10.0

3 Almost every major group improved sales last year

PRODUCT	1958		1959		% CHANGE '58-'59	
	UNITS SOLD IN THOUSANDS	RETAIL VALUE IN MILLIONS OF DOLLARS	UNITS SOLD IN THOUSANDS	RETAIL VALUE IN MILLIONS OF DOLLARS	UNITS SOLD IN THOUSANDS	RETAIL VALUE IN MILLIONS OF DOLLARS
Air Conditioners (Room)	1,673	$466.8	1,800	$ 484.2	7.6%	$ 3.7
Can Openers	300	7.9	805	19.4	160.0	136.2
Cleaners (Vacuum)	3,295	291.9	3,425	314.2	3.9	7.6
Dishwashers	425	116.8	525	136.5	23.6	16.9
Driers (Clothes)						
Electric	843	181.2	935	201.0	10.9	10.9
Gas	397	99.3	490	119.6	23.4	20.5
Disposers	617	55.5	785	62.8	27.3	13.2
Fans	4,445	162.4	4,340	155.0	−2.4	− 4.6
Freezers	1,101	385.3	1,200	406.8	9.0	5.6
Frypan-Skillets	3,750	71.1	3,390	60.9	−9.6	−14.4
Irons	5,740	89.1	6,330	96.2	10.3	7.9
Lawn Mowers (Power)	3,452	291.7	4,200	293.8	21.7	.7
Mixers	2,765	67.3	3,175	76.3	14.8	13.4
Phonograph & Record Players	4,096	574.9	4,275	527.0	4.4	8.3
Radio*						
Home	2,621	65.5	3,195	71.9	21.9	9.7
Portable	3,373	151.8	4,200	168.0	24.5	10.7
Clock	2,038	69.3	2,850	85.5	39.8	23.4
Ranges (Electric)						
Standard	810	206.6	930	241.8	14.8	17.1
Built-in	544	153.5	750	219.0	37.8	42.7
Ranges (Gas)						
Standard	1,665	213.1	1,724	220.6	3.5	3.5
Built-in	231	46.0	361	71.9	56.2	56.2
Refrigerators (Electric)	3,117	997.3	3,750	1,260.0	20.3	26.3
Sharpeners (Knife)	355	5.6	545	7.9	53.5	41.3
Shavers	6,400	124.8	6,150	110.4	−3.9	−11.5
Television (B&W) *	4,920	1,008.6	6,270	1,335.5	27.4	32.4
Washing Machines						
Automatic	2,832	793.0	3,015	844.2	6.5	6.5
Non-Automatic	938	145.4	995	156.2	6.1	7.4
Washer-Drier	170	82.5	200	95.0	17.6	15.2

*Production Figures

. . . trade-in of appliances may become as important in keeping a replacement market humming as trade-in of used cars . . .

(STORY on page 90)

sales, the equipping of new family units, and—for such things as TV sets—second sales to the same families.

• **Replacements Multiply**—For a number of products such as refrigerators, washers, ranges, and TV sets, just about all the U. S. households that are in the market have already been sold. Along about now, however, the items that were sold right after the war are due for replacement, and the volume of replacement sales can run high.

"The higher the saturation, the better the business is," says Vice-Pres. John Craig of Westinghouse. "Take refrigerators, for instance, with 98%-plus saturation. Assume an average life of 15 years. This means a guaranteed annual volume of 3-million units. This factor is beginning to be reflected in automatic washers and driers, where the average life is less."

Frigidaire Div. of General Motors Corp. expects trade-in of appliances to become as important as trade-in of used cars in keeping a replacement market humming.

In the next year or two, TV set makers expect a heavy replacement demand. The average set that's traded in is about 11 years old. At that rate, the sales boom of the early 1950s should provide a strong market in the 1960s. More families are buying second sets, too (BW—Sep.5'59,p46). Manufacturers note a difference in these two markets: Buyers of replacement sets can be traded up to console models; second-set purchasers want a bargain, many of them settling for lower-priced portables.

• **New Households**—The appliance industry notes with mingled approval and concern the prospect for a great increase in the household formation rate in the 1960s—approval of the growth of a market, concern over a problem that has caused growing ill feeling among appliance dealers ever since World War II.

More and more appliances supplied in new houses are being sold through the builder, and dealers are increasingly resentful of being bypassed. Manufacturers, too, find these direct sales less profitable as big builders drive hard bargains. Yet the builder performs one function that the manufacturers welcome—the job of popularizing some of the less familiar appliances by offering them as features of new houses. Builders currently are boosting the electric dishwasher, a low-saturation item.

• **Gas vs. Electricity**—The industry views with happiness the sharpening competition between gas and electricity. The respective trade associations plan to pour ever larger sums of money into promotion of appliances that use their source of power. And the makers of appliances will benefit.

One manufacturer estimates that these efforts by utility companies this year will enable him to transfer 4% of his promotional budget to other uses. Whirlpool, which introduced a gas refrigerator last year, is pinpointing its promotion for this appliance in areas where electric power rates are high.

• **Weak Spots**—Last year was almost uniformly favorable for major white goods and entertainment appliances, but the industry reports point out a few flaws in the picture.

For example, companies that make room air conditioners say that the strength of fourth-quarter sales was caused largely by a desire to beat the Dec. 1 effective date for a new 10% federal excise tax. The radio-TV makers worry, too, about competition from Japan. Last year, Japanese sets accounted for 25% of all home radio sales, 43% of all transistor portables. Rumors of a Japanese transistorized portable TV turned to reality this week when Sony, a major maker of transistor radios, said it will start U. S. distribution of a 13-lb. TV set with an 8-in. screen.

And the entertainment appliance end of the industry is still struggling with new product problems. Phonograph sales came in 5% under estimate last year. Manufacturers blame public confusion over too much talk of "channels" and monaural versus stereo.

A third weakness in the general market is the continued confusion in electric housewares, the traffic appliances that so many stores use to draw trade through price-cutting.

As a group, these appliances showed a slight gain. In their second full year on the market, electric can openers made a fine showing in sales. But many items fell below the previous year's sales. Manufacturers blamed this on deep discounting and use of these items as loss leaders—so many dealers found them unprofitable that they dropped the product lines.

Several companies announced new distribution policies designed to cope with these problems in areas where price-fixing is taboo. Sunbeam is experimenting on the West Coast with selling on consignment, Dormeyer has inaugurated a controlled distribution program, and GE has announced that it will not pay co-op ad allowances on advertising of cut prices. **END**

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In Marketing

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Lady Douglas-Hamilton Organizes Group To Advise Manufacturers on "Taste"

That ill-defined factor, "taste," has become something of a magic word in marketing certain products (BW—May 4'57,p62). This week, a novel—non-profit—consulting service, the American Institute of Approval, was announced whose aim is to "set a standard of supreme good taste toward which the women of America and those who cater to her needs and desires can look for guidance and confirmation."

Director of the new organization is Natalie Wales Douglas-Hamilton of New York, wife of Lord Malcolm Douglas-Hamilton. She has organized a panel of some 75 women—a list that reads straight out of the Social Register. **For a fee, to cover the costs of the operation, four or five members of the panel will evaluate products in terms of taste, for manufacturers and advertising agencies.**

The panel has no thought of horning in on the province of the industrial designer, Lady Douglas-Hamilton explains; it will simply assess the results of the designer's work. She concedes that the panel represents a specialized market—the members were chosen on the grounds of "exquisite and unfailing good taste." She believes they accurately reflect the tastes of the top style-setting and purchasing power in the U.S. **But she is convinced that a vast market at lower income levels has better taste standards than many mass producers give it credit for.**

As an incentive to better taste, the institute will present Awards of Approval for products and designs that meet its standards. Corporations whose products win the award may use the institute's insignia of approval in its advertising for one year.

Lady Douglas-Hamilton reports that preliminary talks with appliance manufacturers, among others, have had enthusiastic response.

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Harnischfeger, GE Regroup Sales Staffs To Get Closer to Their Customer

Two more companies have moved closer to the customer orientation that is the heart of the marketing concept.

Harnischfeger Corp., Milwaukee, a leading producer of construction and mining equipment, is regrouping its sales organization. In effect, the move decentralizes its sales force geographically and at the same time centralizes it functionally. **The company has divided the U.S. into three major sales regions with a newly created sales manager for each region.** But the regional directors—management men moved to field locations—will be responsible for all the products within the Construction and Mining Divisions, not for specific products, as before.

Purpose of the move, says Jack F. Catalane, general sales manager for these divisions, is "to bring a closer relationship between dealers, district personnel, and management."

General Electric Co. has reorganized its Apparatus & Industrial Group into two components: an Industrial Group and Electric Utility Group. As in the case of Harnischfeger, GE aims to "improve focus on customer problems," as well as to "take full advantage" of growth opportunities, says Pres. Robert Paxton.

• • •

Singer to Invade 20,000 Stores With Handy Shelf of Sewing Aids

Handy bins such as the one pictured will be bursting out in some 20,000 variety and department stores this year as Singer Sewing Machine Co. breaks away from selling sewing aids exclusively through its own 1,800 Singer Sewing Centers, in major markets.

The Singer Sewing Shelf won't carry sewing machines themselves—nor, says Charles F. Bruder, vice-president, does the company view this as a first step toward sewing machine distribution beyond its own outlets. The shelf will carry needles, bobbins, brushes, and a new line of small instruction books. Stores such as Woolworths, Grants, Macy's, Kresge, and J. L. Hudson will have them.

The shelves' primary function is to make it easier for the woman who sews (an estimated 40-million of them in the U.S.) to pick up the accessories she needs by making distribution far wider. They will also keep the Singer name very much in the shopper's eye. And they might have this important plus: to underscore to the sewing machine buyer the advantage of buying a home product, rather than an import.

Donahue Sales Corp., distributor of packaged Talon Zippers, is national distributor of the shelf.

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Marketing Briefs

Magazine advertising jumped 14% in dollars and 7% in pages in 1959, according to Publishers Information Bureau. Dollars hit a record $786.7-million, with all categories gaining. In pages, the only category to drop was the fashion field. Sunday supplements, not counted in the other categories, lagged 6% in pages, 5% in dollars.

Dissatisfied customers of a Denver service firm were always told, **"Mr. Chiwawa, our complaint manager, is tied up in the back room and can't come to the phone"** when they called the complaint department. The Denver Better Business Bureau found the statement was precisely true. "Mr. Chiwawa" was a Chihuahua dog, tied in the back room, and unable to come to the phone.

NOW—GULF SERVES SHIPS IN

By the establishment of an international network of marine servicing facilities, Gulf is now able to provide shipowners and operators with the highest quality marine lubricating oils and helpful marine lubrication engineering service at practically all of the shipping and trading ports around the world.

Gulf's International Marine Marketing Program also makes available marine bunker and diesel fuel oils through the facilities of Gulf Oil Corporation; Gulf Oil (Great Britain) Limited; Gulf Oil (Belgium) S.A.; Danish American Gulf Oil Company A/S; Oy Gulf Oil Ab; Gulf Oil (Nederland) N.V.; Svenska Gulf Oil Company A.B., and their affiliates at many of the world's major shipping ports.

This new Gulf network of marine service facilities will expand as commitments require. At present it includes ports in: *Great Britain, France, Spain, Africa, Japan, West Indies, Canal Zone, Finland, Sweden,*

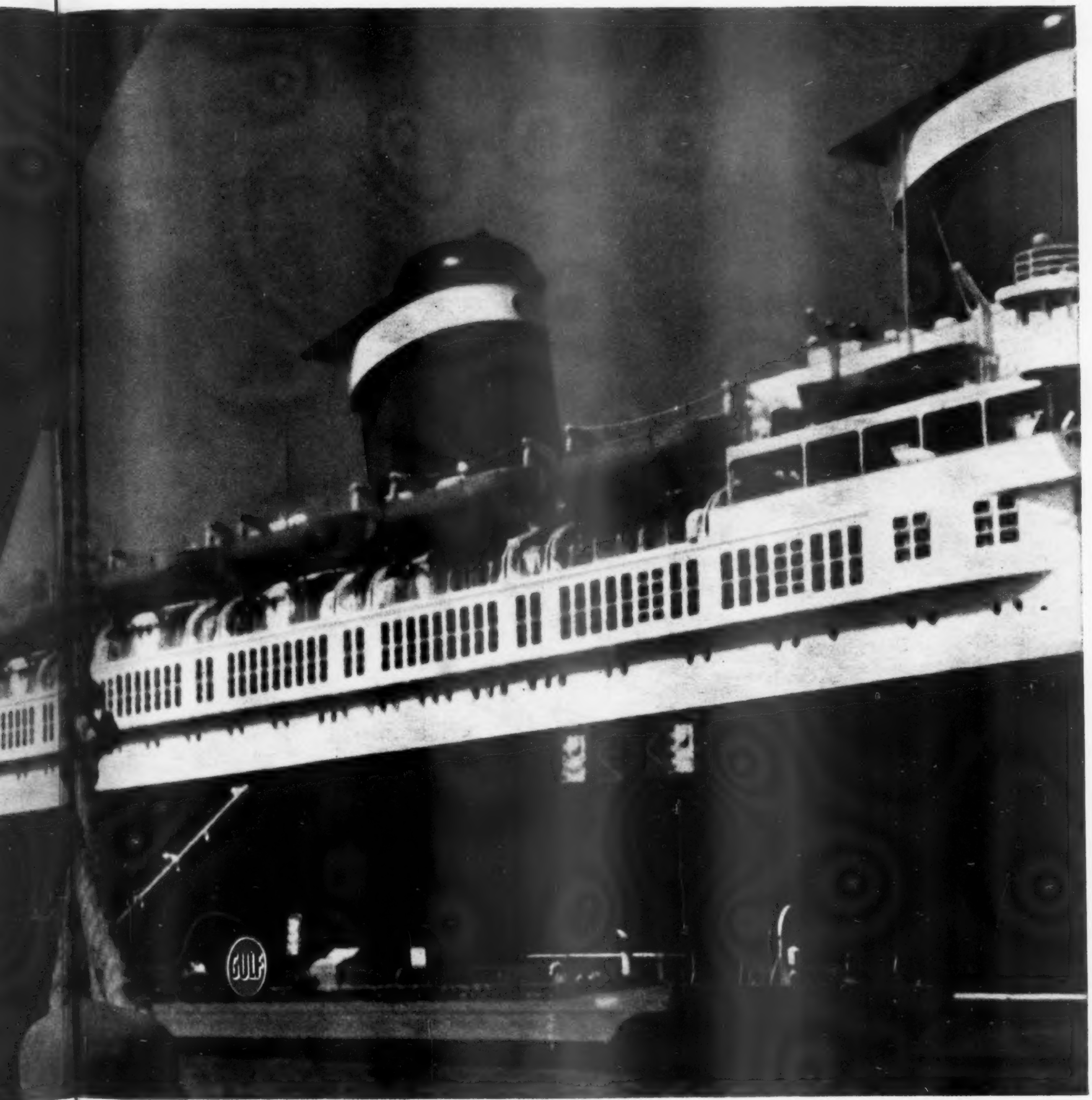

Photo shows SS. America of the United States Lines being refueled by Gulf barge in New York harbor.

INTERNATIONAL OUTLOOK

BUSINESS WEEK

JAN. 23, 1960

A BUSINESS WEEK SERVICE

Washington has moved right into the middle of the feud between Western Europe's two trade blocs—the six-nation Common Market and the seven-nation Free Trade Assn. (page 32). The Administration has decided that, in tackling the problems of trade and U. S.-European aid to the underdeveloped countries, this country should be ready to join a new 20-nation organization that would include the U. S., Canada, and the 18 free nations of Europe.

The idea is to set up the new organization after the U. S. elections. Meanwhile we will be involved in the dispute between the Six and Seven via an interim 20-nation committee.

But don't look for any quick solution of this European trade fight just because Washington is taking a hand. Most of the members of the Outer Seven, including Britain, still want to organize some kind of free trade area in association with the Common Market. But that's a solution the French still are bitterly opposing—and one that the U. S. has serious doubts about.

Two years ago Washington would have accepted a Europe-wide free trade area without any complaint—regardless of the damaging effect it might have had on many of our exports. But that was before Washington became worried about our balance of payments, and about the competitive strength of U. S. industry in international markets.

From the economic angle—though not the political—even the Common Market looks like a dubious proposition today. That's because of the discrimination against outsiders that's automatically built into any such trade group. Still, U. S. officials regard this as water over the dam. What they don't want now is a widening of the area that does discriminate so that it includes the whole European market.

In short, there is no easy way to reconcile the trade interests of the Six, the Seven, and the U. S. and Canada. About all we have done so far is to make sure that the economic split in Europe doesn't develop into a real political feud.

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Soviet Premier Khrushchev expects economic as well as diplomatic dividends from his cut in Russian conventional armed forces (page 25). In fact, U. S. experts on the U.S.S.R. think that Khrushchev had domestic economic needs primarily in mind when he made this move—although in timing the move he probably was thinking of the way it would strengthen his political position at the upcoming summit conference.

The big economic gain for Russia will come from the extra manpower—about one-million men—that can be added to the industrial work force over the next two years. Annual savings in the military budget (an estimated 17-billion rubles) are of secondary importance.

As things stand now, Khrushchev needs about 7-million new workers if he is to meet the goals of his Seven-Year Plan. Most of the gap will have to be filled by moving more workers off the collective farms and by boosting employment of women. But demobilized soldiers will help a lot.

As Washington sees it, though, Khrushchev isn't moving out of economic desperation. Far from it. After evaluating the first year of the Plan, U. S. officials are inclined to believe that, in all the main areas, Russia's 1959

INTERNATIONAL OUTLOOK (Continued)

production exceeded planned goals. That goes for total industrial production (up 11% instead of 7.7%) as well as for steel, coal, oil, and electric power individually. The one big exception is the chemical industry, which fell well below the target.

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When Premier Kishi signed a new U. S.-Japanese defense treaty in Washington this week, he put Japan on an equal footing with this country's other big allies (BW—Jan.16'60,p24). The new treaty, plus other related agreements, has removed most of the U. S.-Japanese differences left over from the occupation.

Kishi, of course, will get much of the credit for all this in Japan. Even so, he faces political troubles back home—especially from his own Liberal Democratic (conservative) party.

Kishi will be able to hold together the factions within his party long enough to get his defense treaty ratified by the Diet. Approval can be expected by May or June. But once that is out of the way, several rival party leaders plan to gang up on Kishi, force him out of office.

Japan's relations with Red China will be the issue used by Kishi's rivals. There is considerable popular and business support in Japan for closer ties with Peking.

Kishi has taken the stand that Japan should improve trade and cultural relations with Red China—but not at the price of the steps toward political recognition that Peking has been demanding. **His rivals are saying that the price for better relations, especially for more trade, is some political concession**—plus the removal of Kishi himself.

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Britain is heading into an investment boom. Rising capital expenditures by private industry are coming on top of the present high consumer spending and big public outlays on roads, housing, schools, and hospitals.

The auto and steel industries in Britain both plan to push their 1960 investment about 50% above that in 1959. Plans for all manufacturing add up to a 14% increase, and for other businesses to a rise of 20%. This contrasts sharply with last summer's forecasts that 1960 would show a 4% drop in private capital spending. The Conservative election victory last October largely accounts for the change.

With this kind of boom in the making, the Macmillan government is bound to shift from last year's policy of easy credit and budgetary pump priming. The signal has come for at least mild restraint, perhaps even for a hike in the British bank rate.

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Cuba has about run out of dollars, so the Castro government is making new moves to cut imports and build up exports.

As one step in a series of new controls, Cuba's National Bank last week announced regulations to limit the amount of money private banks may lend to finance imports. At the same time, the National Bank established much looser limits on the amount of loans that could be made to the sugar industry. In this case, the idea is to stimulate loans to finance this year's sugar harvest, thus increase foreign exchange earnings.

CHANCES ARE YOU CAN USE THIS "SPOT-A-MATION" IDEA TO CUT YOUR COSTS

Simple, inexpensive and easily built in the user's own shop, this "Spot-A-Mation" Idea is typical of the ways Bellows "Controlled-Air-Power" devices are being used to cut costs in all types of industries. Although the machine illustrated here is used to roll-thread ¾" pipe plugs, this same unit, with only minor tooling changes, can perform drilling, tapping, counterboring and similar operations.

Think of the many possibilities in this basic "Spot-A-Mation" Idea. For example, in place of the Carbi-Drill units, Bellows Air Motors or other Bellows packaged work units could be used with the Bellows Rotary Feed Table. On the work table, the number of work stations could be increased to permit a sequence of a number of operations, or the same operation could be done simultaneously at a number of work stations. Machining, forming, assembling, packaging, sorting . . . man's ingenuity is virtually the only limit to the ways this "Spot-A-Mation" Idea can be used.

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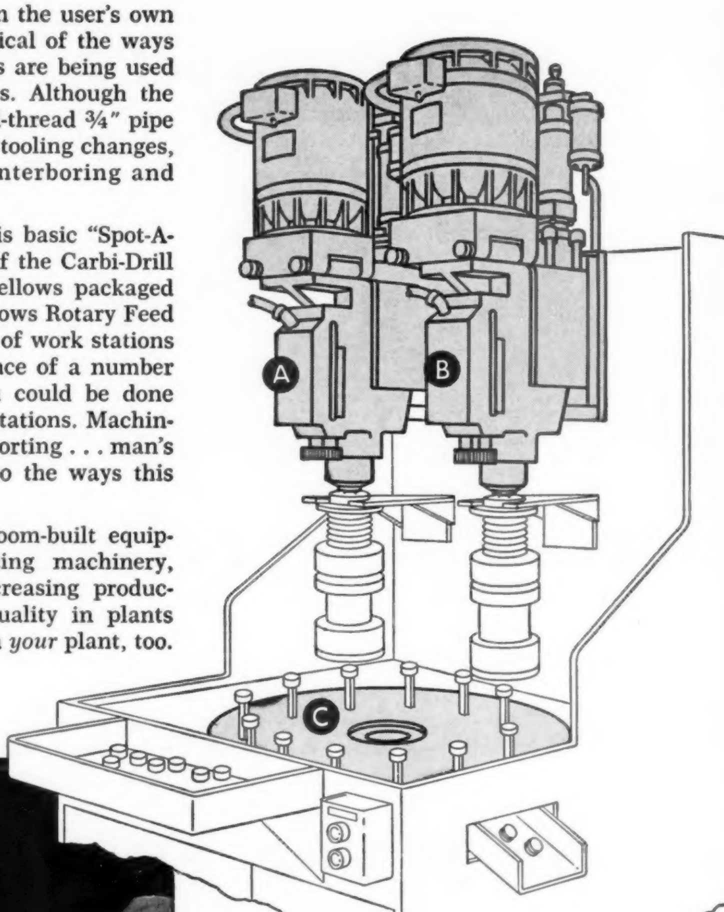
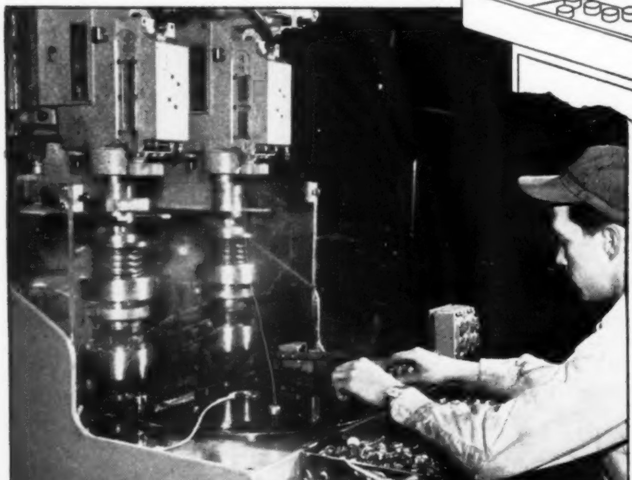
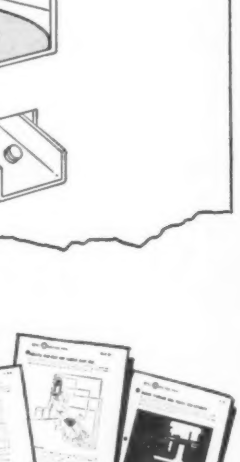




Essentially, this machine consists of two heavy duty Bellows Carbi-Drill units, "A" and "B", equipped with roll thread heads and synchronized with a Bellows Rotary Feed Table, "C", which positions work pieces. Operation is continuous and automatic. Operator merely feeds; parts are ejected automatically. Production is double that of former equipment, less skilled operators are used and rejects have been virtually eliminated.

THIS SPOT-A-MATION IDEA FILE IS YOURS ON REQUEST



Contains complete information on the above "Spot-A-Motion" Idea so that you can adapt the Bellows Rotary Feed Table with Carbi-Drill units or other Bellows packaged work units for use in your own plant, plus installation data, wiring diagrams and equipment lists for scores of other Bellows "Controlled-Air-Power" applications. Write for yours today. Address Dept. BW-160, The Bellows Co., Akron 9, Ohio.

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In Washington

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Military R&D Budget Takes a Cut, But Some Projects Get More Funds

The Administration's budget (page 28) provides for an over-all $300-million decrease in military research and development appropriations for fiscal year 1961, beginning in July. **Pres. Eisenhower is asking for $3.9-billion, compared with $4.2-billion in the current fiscal year.** Actual spending during fiscal 1961 will run $3.917-billion, up $300-million from this year.

The amounts allocated for specific projects such as anti-missile missiles, air-to-air weapons, satellite reconnaissance are tightly guarded secrets. Pentagon sources, however, specified this week the percentage increases and decreases for R&D on these projects:

INCREASES

MIDAS—Air Force early warning satellite	70%
DYNASOAR—Air Force manned high-altitude flight	66%
EAGLE—Navy air-to-air missile	48%
PERSHING—Army 500-mi. tactical missile	42%
SAMOS—Air Force reconnaissance satellite	33%
SERGEANT—Army 100-mi. tactical missile	30%
MINUTEMAN—Air Force solid-fueled ICBM	19%
ATOMIC AIRCRAFT ENGINE—Air Force and AEC	18%
NOTUS—Army communication satellite	8%

DECREASES

TRANSIT—Navy navigation satellite	58%
B-70—Air Force supersonic bomber	50%
ASROC—Navy anti-submarine missile	34%
ZEUS—Army anti-missile missile	31%

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Supreme Court Upholds Barge Lines In Fight Over Rail Freight Rates

Barge lines won a big victory from the U.S. Supreme Court in their fight with the railroads for freight traffic. The court upheld a district court ruling that bars any railroad rate practice that deprives shippers of the savings of barge transportation.

In the test case, **shippers who move grain from the Midwest by barge pay much higher railroad rates to move the grain from the transfer points on the Tennessee River to consuming areas in the Southeast than do shippers who bring grain into the same transfer points by rail.** Barge lines complained that much of the savings in shipping by barge to the transfer points was eaten up by higher local rail rates paid to complete shipment.

A federal district court in Alabama declared the rail rates unlawful. Over the bitter objections of the railroads and the Interstate Commerce Commission, which says the ruling will probably "wreck the delicately balanced grain structure," the lower court said such devices deprive "barge transportation of its rightful place in the national transportation system. . . ."

The Supreme Court ruling affirming this decision is in line with previous declarations by the court against rail discrimination against barge traffic. **But it is the first time the principle has been applied to railroads jointly through rates.** And, although the case involved only grain shipments, **the ruling is expected to set the pattern for all areas of barge-rail competition.**

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New Low-Powered Radar System Spots Small Targets at 2,600 Miles

The Naval Research Laboratories this week reported a new radar system, called Project Madre, that can bend its beam over the horizon, spot a small target as far as 2,600 mi. away, and tell how fast it is moving.

Madre differs from Tepee, an earlier system with even greater range (BW–Aug.15'59,p32), in using lower power, much lower frequency (between 3 and 30 megacycles, compared with about 10,000 for Tepee), and bouncing its signal only once off the ionosphere, the atmospheric layer that reflects electronic beams.

A magnetic drum takes 20-second selections of signals at a time and sorts the significant bounce-back beam from the background noise. The first installation is scheduled for completion at Chesapeake Beach, Md., next September.

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Hebert Committee Would Tighten Bars On Defense "Sales" by Retired Officers

The Hebert committee, which made big headlines last year with an investigation into alleged influence peddling on defense contracts (BW–Aug.15'59,p27), called this week for changes in conflict-of-interest laws regarding retired military brass on contractors' payrolls.

The committee recommends a two-year ban on sales by retired regular officers to any military service, with criminal penalties for violations. Present rules prohibit sales to the retired officer's own service.

Hebert would also broaden the legal definition of defense "selling" to include indirect sales efforts that do not involve contractual transactions. Examples: arranging the presentation of project ideas, preparing project proposals, spadework on submission of bids.

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Washington Briefs

The State and Commerce Depts. **plan to push U.S. trade** by tripling the 113 commercial officers now stationed abroad. The bulk of the new officers would be drawn from industry rather than the State Dept.

The long legal battle over the once hot Dixon-Yates power contract went to the Supreme Court this week. The U.S. asked reversal of a Court of Claims award of $1.8-million damages to the companies for contract cancellation.

A federal grand jury in New York is investigating possible criminal **antitrust violations in the insurance industry**—especially aviation insurance. Records of several companies and two associations are under subpoena.

THE MARKETS

The Public Joins the Pro

THE grandmotherly receptionist in the picture above took up a stand for the first time this week in the medieval lobby of the Federal Reserve Bank of New York. Her job was to assist small investors who turn up at the Fed to purchase high-yielding Treasury bills.

The Fed's decision to install a receptionist is wholly unprecedented. Each Monday, the day that the Treasury bill auctions take place, the Fed expects a larger than normal run of traffic. But those who take part in the bill auction, including the men in the other pictures, are normally highly skilled professionals. These professionals are in fact the market, because they set the price and yield.

But something new has been added. In the past few weeks, there has been an extraordinary public demand for Treasury bills. And this Monday, the Fed had to add the receptionist to guide $1,000 and $2,000 investors to Window 31, traditionally the stamping ground of bank and bond-house messengers who carry sealed bids of $50-million or more.

• **Alluring Rates**—This public infatuation with the Treasury securities market really began with the "magic fives"—the 4¾ year obligations marketed last October paying 5% to investors. Since then, the public has become increasingly aware of the very high rates the Treasury is paying on all of its borrowings—rates far above the yield on savings accounts in mutual savings banks or on funds held by savings and loan associations.

Now this interest has spilled over into the bill market. It was stimulated two weeks ago by reports that a special issue of one-year bills would yield well over 5%. Although few laymen could distinguish between a bill and a bond, demand from small investors was sufficient to reduce the bill rate from an expected 5.2% to less than 5.1%. The yield to small investors was 5.36%.

This week, the public continued to buy bills. Small investors—those putting in bids from $1,000 to $200,000—took up $286-million of a $1-billion issue in 91-day bills, about $75-million more than the average allotment recorded in the past few months. In addition, they took $80-million in 182-day bills, compared to an average of $50-million last year.

Partly, as a result of this public participation, bill yields dropped. The 91-day bill rate fell to 4.42% from 4.59% the week before; the 182-day bill rate was 4.66% compared to a yield of over 5% two weeks ago when a similar issue was sold.

FIGURING BIDS is Monday morning job for 17 securities dealers and banks that make up the market. A. G. Lanston & Co. men have their bid.

RACING to Federal Reserve Bank, messenger arrives with scant minutes to spare before deadline for submitting sealed bids for the weekly auction.

he Pros at Treasury Bill Auctions

When an investor buys treasury bills –which come in denominations of $1,000 and up–he is getting the safest of all securities. Most bills mature in 91 days, which makes them "the nearest thing to money."

I. Most Sophisticated Market

The introduction of Treasury bills, and their sale by auction, was started in 1929. The Treasury, taking a lesson from the British, figured it would be easier to let the market bid for the bills than to set a precise rate. In this way, the Treasury avoids an oversubscription one week and an undersubscription the next.

Because bills are sold at auction, they carry no interest rate. Instead, bidders offer to pay a discount from par value, figuring the yield by the amount below par they have to pay. The average price of this week's bills, for instance, was 98.87, which meant that investors had to pay roughly $988 for each $1,000 bill, which works out to a yield of 4.4%.

The small investor can make only noncompetitive bids. The price he pays is the average price reached by the competitive bidding of the big banks and corporations. Thus, the small investor is buying blind when he puts in his bid, which has to be accompanied by 2% of the amount he wants.

• **Market of Pros**—Public participation in the bill market is something that many Wall Street veterans find hard to accept. Of all the securities markets, it is the most professional and fast moving, dominated by a small group of banks and government bond dealers (BW–Jul.12'58,p100). The average transaction normally involves $5-million to $10-million; trades in many millions are frequent.

For all its size, the bill market is extraordinarily sensitive. The bill rate is regarded as the keystone of money market rates, the one that most accurately reflects the supply and demand of short-term funds. Some money market men fear that widespread individual interest could be a disruptive force that would make it harder for the pros to get an accurate "feel" of the market—something that is important to the three main elements dealing in bills:

• The Treasury. The bill market is the Treasury's main source of short-term cash on a regular basis. With the 4¼% ceiling on sale of long-term obligations now in effect, the Treasury has been borrowing more and more funds via auctions of bills (BW–Jan.16'60, p37).

• The Federal Reserve. The Fed's open market operations, by which it decreases or increases member bank lending power, are carried out by sale and purchase of bills. Under its "bills only" policy, the Fed has limited itself to such transactions, except in cases of extreme market disorder.

• Investors. A growing number of big investors—banks, corporations, pension funds, foreign accounts—buy high-yielding bills instead of allowing their

SELLING the bills won on Monday, traders at First Boston Corp. spend Tuesday morning on wires to customers.

cash to lie idle. Of the $41-billion in bills outstanding, corporations hold $20-billion, banks nearly $5-billion.

The Treasury has tailored its bill offerings to meet the needs of investors. It used to have only weekly 91-day bill auctions. Two years ago it began selling 182-day bills, which corporations find convenient either for funds ticketed for taxes or for working capital that will be needed at a later date. Last year, it offered one-year bills that come due each quarter. These make it possible for a corporation to stagger its maturities in line with its cash flow.

• **Unlike Banks**—Making bills attractive to the public has never been considered. High rates, though, have done the trick. Even though the small investor doesn't quite know what he is going to get in the way of yield, he is convinced that he can't go wrong with a Treasury bill.

To a certain extent, the public is right. The yield differential makes bills much more attractive than a savings account. But there's an important difference between socking your money away in a bank and investing it in a highly volatile security. If the investor needed cash before his bill matured, he might have to take a loss.

• **Mingled Emotions**—The Treasury views the rise in public demand with mixed feelings. It is profiting because the small investor demand is cutting its interest costs. Securities dealers say the big public demand for the special one-year bill issued earlier in the month lowered the Treasury's cost about $150,000. On the other hand, most of the money going into bills is being diverted from savings banks and other savings institutions, including the Treasury's own savings program.

Government securities dealers also fear that small investors could disrupt the sensitive bill market by (1) slowing up the precise timing needed to make the bill market operate efficiently (on the special one-year bill, for instance, payment dates had to be delayed because the Fed couldn't process all the tenders in time) and (2) presenting the Treasury with a false picture of what the dealers consider true demand.

II. A Busy Monday

The process by which the weekly bill rate is determined gets under way late Monday morning, only a few hours before bids are actually delivered to the 12 Federal Reserve Banks; the New York Fed handles roughly 60% of the tenders. Big investors, banks, dealers, and corporations start assessing the various factors that will influence their bids. Selecting a bid—or a bid range—calls not only for technical knowledge, but also for plain old seat-of-the-pants judgment. Each bidder constantly checks others to bolster his own opinion.

The dealers also get in touch with the New York Fed to pass on information. This is in line with their responsibility of keeping the Fed's own trading desk fully appraised. It also opens up the way, of course, for trading business from the Fed in the secondary bill market. These calls go on most of the morning and early afternoon, as dealers discuss the volume of outstanding bills, customer demand at the banks, current "dope" stories in newspapers, newsletters, and magazines—anything that helps them size up the state of the market.

• **As Deadline Nears**—By 1 p.m., 30 minutes before the deadline, the tempo of the calls is feverish. By then, the banks have a firm line on the amount of bills they will bid for themselves and their customers—whose orders might range from $30-million for a big steel company to $2,000 for a customer with an account in a branch. The dealers also have made last-minute checks. A few corporations—such as Standard Oil of New Jersey, which has a jealously guarded trading desk and makes direct bids—are engaged in the same maneuvering.

Dealers talk in terms of two possible bids: the "to be sure" bid represents the price at which dealers think they'll be able to get an allotment; the "stop out" bid is the price at which they think the Treasury will cut off allotments. By 1:20, the dealers get down to discuss prices and rates with the Fed.

• **Last Run**—In the final minutes before 1:30, the Fed goes through a last "run" of dealers to get a consensus of the market and to check whether it "runs" (shifts a few pennies up or down) or "jells" (stabilizes). Ordinarily, the Fed uses this consensus as the basis for its own bid and that which it tenders on behalf of other accounts.

The Fed bids in a variety of ways, depending primarily on credit policy demands at the moment. For instance, if it's desirable to tighten credit, it will enter a bid to "miss," so that some or all of its maturing bills will run off.

• **To the Penny**—The big investors, though, have to set the price; so their pencil figuring is sharpest. They make bids out to the penny, equal to $10 on a $1-million bill, the usual round-lot trade. Each has his way of figuring.

The more sophisticated prefer to scale out their bids, offering to buy specific amounts at various stepped-up yields. On a scaled-out bid, the bidder hopes to get some bills, but he figures that if he's lucky he'll get a bundle—and the more he gets the higher his average yield will be.

Some investors indulge in "tail bidding"—all bids beyond the "stop out" price constitute the tail. Frequently, corporations will put in a bid for $10-million at prices they think they can get, but they also throw in a "tail bid" at a much higher yield for an added $5-million or so. If, by some quirk, they are allotted the bills at a higher yield, they can liquidate the lower-yielding bills or other securities to pay for them.

• **Off to the Fed**—By 1:20 the decisions are made. Then there's a mad rush by the dealers' messengers for Window 31 at the Fed, where tenders are accepted. (At Aubrey G. Lanston & Co., the messenger leaves by a special elevator held for him alone.) Anyone who arrives at the Fed after 1:30 is out of luck. His tender won't be accepted.

What happens when the prices are revealed is frequently unexpected. Few dealers will forget a weekly auction in 1955 when the dollar volume of tenders barely covered the amount offered. The low bid (highest yield) is usually 3/100 of 1% or 4/100 of 1% away from the average bid, but that time the low bid accepted was 25/100 of 1% away. This meant there was a wide range in prices, and many dealers found themselves stuck with bills bought at very high prices; those who sold out had to take big losses.

However, the accepted bids normally are extremely close. In this week's auction of 91-day bills, there was a difference of only 11¢ a $1,000 between the high bid and the "stop out" price.

• **Possible Coups**—Sometimes dealers can pull off minor coups, by jumping the price and volume of their tender at the last minute. In so doing, points out one dealer, "we end up with more of an allotment," forcing the banks to make one or two choices: whether to buy from the dealer (who makes his profit in the spread between the bid and asked prices on bills), or disappoint their customers.

However, the dealers, because of their special position in the government market, have additional leverage to work with. They don't have to put up any downpayment for their bills, and payment isn't due until Thursday; so they have from Tuesday to Thursday to swap or sell their bills. If they can't get rid of their allotment by then, they have to finance them, though—and this is a big problem these days. The banks, once their chief source of funds, are nearly loaned up and dealer loan rates have climbed to 5½%. For a dealer financing 4.05% Treasury bills, this means a "negative carry"—an interest cost higher than the yield on the securities he's borrowing on. Other sources of funds, however, are repurchase agreements with the Fed—which decides and initiates any such agreements, the Federal Funds market, and clearing house funds from the banks. END

At a famous ball in Charleston, S. C.

Wall St. Talks . . .

. . . about signs of bear market, Olen deals, private placement of preferred stock by utilities.

One stock advisory service thinks it has spotted a bear market trend. Its business has picked up sensationally in the past few weeks, and it has had to put on extra help. The service says such a big pickup has been followed in the past by a basic turn in stock prices—in this case, it reasons, a downturn is under way.

The trial of Maurice E. Olen, former head of H. L. Green Co., for alleged securities violations, will put the **searchlight on some deals that so far have not received public attention:** Wertheim Co., a special situation Wall Street house, for its transactions with Olen; Massachusetts Mutual Life Insurance Co. for making a loan to Olen with his shares in Green as collateral; and a big retailer for setting up a special stock deal for Olen. The whole accounting industry is on edge to see what happens to Olen's accountants; it's one of the rare instances where accountants have been indicted on a criminal charge.

Investment bankers aren't missing the significance of **Consolidated Edison Co.'s bid for state approval to make a private placement of \$60-million in 5¾% preferred stock** with seven institutional investors. They say it may start a new financing trend for the big utilities that have only placed seven preferred issues privately in the last 10 years. Here's why: Big bond issues are hard to sell publicly now, and the utilities don't want to float big common stock issues for fear of depressing stock prices. On the other hand, institutional investors go for preferred stock because of the 85% tax credit on dividends, are willing to buy them if they can get big blocks and negotiate terms.

The explanation for a fast-moving deal involving a **spin-off of Oakland Consolidated Corp.,** formerly a subsidiary of Detroit Gray Iron & Steel Foundries, Inc., came to light this week. Oakland stock—which wasn't available officially until last week—came out at a nominal 25¢, jumped to \$4 in over-the-counter trading. Then this week word leaked out that the company already has negotiated a merger with Capitol Construction Corp., a privately owned Orlando, Fla., land developer. Carl Rosen, Capitol chairman, is taking over as head of Oakland, will have "over 50%" of the company's stock.

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In the Markets

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Fraud Charge Holds Harry Jasper, Promotor of British Realty Deals

The man stepping into a police wagon is Harry Jasper, the British real estate promoter whose paper empire collapsed last fall when the London Stock Exchange suspended trading in shares of 16 of his companies (BW—Oct.3'59,p31). Picked up last week by the London police, he was charged with fraud in connection with his bids to take over Lintang Investments Co., a realty company, and Ely Brewery. Jasper is slated to go on trial in two weeks along with Friedrich Grunwald, a long-time business associate, and Herbert H. Murray, managing director of the State Building Society, a savings and loan association that provided Jasper with much of his financing.

Also arrested this week, in Montreal was **John C. Doyle, president of Canadian Javelin, Ltd.,** whose stock gyrations during the past few years have caused it to run afoul of the Securities & Exchange Commission. Canadian law permits arrest on the basis of an individual's complaint, and Doyle was charged by a minority stockholder with the theft of $4.8-million worth of Javelin shares. (Similar stockholder actions have already been filed in New York.) He claims that Doyle used 1.35-million shares as collateral on a $4.8-million loan from a Swiss bank, and that the funds can't be accounted for. The Quebec Securities Commission, though, which has looked hard at Javelin in the past, says the complaint doesn't merit a probe on its part.

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Underwriters Brood Over 1959 Slump In Total of Corporate Financings

Capital raised by corporations in 1959 slumped to the lowest level since 1955, the Securities & Exchange Commission said this week. Total corporate financing was down to $9.6-billion, $2-billion less than the year before and $3.3-billion under the $12.9-billion record racked up in 1957.

This decline in public financing—private placements at $3.6-billion were virtually the same as a year ago—**is causing concern to some underwriters, who claim that their earnings are being pinched.**

Despite the chop in total financing, offerings of common stock were up a healthy $1.3-billion in 1959 over 1958. They amounted to more than 25% of total issues sold, compared to only 17% the year before. The rise in equity sales indicates that companies were taking advantage of the long bull market. Debt financing dropped $2.6-billion.

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Investment Companies Report Optimism, New Dividend Policy, Asset Transfers

The annual reports of investment companies provided some revealing insights this week:

One William Street Fund surprisingly reported that common stocks now made up 93.2% of its $295-million net assets. This percentage is far higher than some industry men expected of a "fully managed" fund at this stage of the bull market—and reflects much optimism.

Madison Fund, one of many closed-end trusts whose shares are selling at a discount from net asset value, has inaugurated a new dividend policy that it hopes will cut the discount. Stockholders can choose between four different methods for receiving stock or cash distributions.

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Electronics Stocks Hit by Selling Of Holdings by Company Insiders

Insider selling—which often precedes a general market decline—is picking up in the electronics stocks. The latest insider report from the American Stock Exchange shows heavy selling in nine companies by officers and directors.

Sidney Harman, president of **Harman-Kardon, Inc.,** a producer of hi-fi equipment, sold 81,000 shares in his company, cutting his total holdings to about 155,000 shares, or 34% of H-K shares outstanding. C. J. Breitwieser, a director of **Cubic Corp.**—first offered to the public last August at $12 and now trading at $60—sold 1,600 shares, apparently at prices close to the current high. Sigmund P. Rosen, vice-president of **Jetronic Industries, Inc.,** sold a small block of 600 shares. And Vessarios Chigas, executive vice-president of **Microwave Associates, Inc.,** sold 3,200 shares.

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The Markets Briefs

Any talk of dissension at **Cherry-Burrell Corp.,** Cedar Rapids maker of dairy equipment, ended this week when the incumbent C-B board of directors was reelected unanimously—84% of outstanding shares were voted.

The Securities & Exchange Commission this week moved in on a small New York broker-dealer caught in the gyrations of an obscure over-the-counter stock known as **Oreclone Concentrating Corp.** In a 24-hour period last week, Oreclone plumeted from $28 a share to $4, then recovered slightly to about $7. The broker, **Smith, Holly Co., Inc.,** had been buying Oreclone aggressively, the SEC alleges, and had built up a position of 25,000 shares at an average cost of $22. When the stock fell out of bed, SEC got a court order closing the firm until it determines if it can meet its obligations.

Amoco Beats Union on Job Rules

● Oil company rides out 191-day strike, wins right to assign minor tasks across job classification lines.

● It was a clear-cut trial of the work rule issue, since wages and fringe benefits were not in question.

● Management keeps its right to write job descriptions, and the union loses its battle for veto power.

Management's drive for greater efficiency is stirring workers' fears of losing jobs, and long, bitter strikes are the result. The nature of the new bargaining questions facing management and the unions was pointed up in the 191-day strike at American Oil Co.'s Texas City refinery, which ended last week in a management victory.

The issues were posed so clearly at Texas City because a quirk in oil bargaining had set aside the question of wages before Amoco began to bargain with the Oil, Chemical & Atomic Workers. Amoco's hourly paid employees at Texas City, who now average \$2.94 an hour or \$6,100 a year, were granted a 5% general wage increase as part of an industry pattern in March, 1959.

• **Right to Manage**—Amoco billed the chief issue in the walkout as "management's responsibility to run the refinery as a successful business enterprise." The union, the company said, "has demanded veto power over management in the exercise of management's responsibilities.

The union angrily rebutted with charges that the Texas City walkout and a sister strike at Amoco's El Dorado (Ark.) refinery were "caused by company efforts to break down job assignment rules and seniority and arbitration provisions." It also declared that the strikes were union battles for survival, not for contract gains.

The dispute had its roots in company efforts to improve efficiency during the year before the union contract expired last July. In 1958, when the oil industry hit a pretty drastic slide, the company cut back its operation and tightened up its work practices. A layoff of some 350 people during the course of the year gave weight to the fear of job loss among workers in the 800-acre Texas City refinery.

• **Job Jurisdictions**—Management rights are often loosely defined. In practice, they differ from industry to industry—and plant to plant. In one case, they may involve the size of a crew; in another, the assignment of work.

In the oil refineries, management's rights turned on the freedom to assign work to improve efficiency. If a layout man, for example, found some scaffolding boards in his way, he was told to knock them down himself instead of waiting for a carpenter or a laborer to do the work. Small issues such as this caused grievances to mount.

• **Ripe to Strike**—By the time negotiations rolled around in 1959, the refinery workers were chafing at what they considered the erosion of their job rights. None of the laid-off men had been called back, which kept alive the nagging fear of unemployment. The union demanded a chance to participate in writing job descriptions and the power to veto job assignments. Both demands were firmly rejected by Amoco.

The strike started on July 1, 1959, with all 1,250 employees out. Four hours after the picket lines went up, the company announced its intention of operating the refinery. Within two months some 300 management people, working six or seven days a week, were getting out 100,000 bbl. a day, about 75% of pre-strike production.

This, as much as anything else, caused the union to come around toward a settlement.

• **The Outsider**—The oil company also got valuable outside help from L. J. Saccomanno, a Houston lawyer. Earlier, Saccomanno had given the Teamsters a rough time when he successfully represented Desmond A. Barry, president of the Galveston Truck Lines, in a fight over a "hot cargo" boycott.

On Aug. 23, Amoco wrote to all employees, inviting them to return to jobs; it told them to sign and return the letter if they wanted to come back to work. About 200 did. But, according to the company, "violence and threats" against those willing to return caused a second letter to be sent out. The company said then that it would not be advisable for workers to return.

Fourteen, however, persisted. They sought the advice of Saccomanno, who filed a \$375,000 suit against OCAW in November. He contended that threats of violence violated the men's right to work. On Nov. 23, Saccomanno himself led the 14 men back to work through lines of jeering pickets.

• **Shooting**—Some violence occurred after that. A shotgun blast slammed into the house of one returned worker. Carpet tacks were strewn in the driveway of another. There were other incidents. The company suspended one man for alleged violence and fired two others. In the meantime, some 60 recruits took refinery jobs.

Under growing pressure, union negotiators sat down for 32 hours of steady meetings with the company. They reached a settlement on Jan. 6.

The terms were just about those outlined by management a month earlier.

• **Work Assignments**—The clause governing temporary work assignments was strengthened to permit Amoco to assign men to minor jobs outside their regular classification if the work is incidental to their main work. The company claims that this gives it new flexibility in making work assignments. The union, however, contends that this right has always been recognized. It claims, instead, that the new wording "destroys the uncertainty as to how far the company can go."

However, a victory for management seems reasonably clear. It retained its right to prescribe work to be done in each of nearly 100 job classifications and to determine the qualifications necessary to perform each job.

As sweetening for the union, the striking employees will get full credit for 1959 vacations as well as working-time credit toward 1960 vacations. One suspended worker has been reinstated, and Amoco has agreed to abide by a National Labor Relations Board decision in the matter of two others fired for alleged violence.

• **Moral Victory**—OCAW is reluctant to concede that it took a shellacking. It points out that, though management kept the refinery in operation, only 60 workers mostly nonunion people—out of 1,250—returned to work.

Privately, the union knows it was licked. The loss at Texas City remains a blow to OCAW's prestige. The union faces a job of rebuilding morale in Texas City. It will also have a tougher time in settling a long-running strike on similar issues against Amoco's parent company, Standard of Indiana, at Sugar Creek, Mo. And, the union will face heavier odds when negotiations come up soon with Humble at Baytown, Tex. Humble isn't expected to concede anything that Amoco wouldn't. END

New Mine Head Seeks Peace

Kennedy, taking over as UMW's top man by designation of executive board until December election, pledges to "continue peaceful relationships"; Lewis remains as adviser.

UMW's new president, Thomas Kennedy, takes post yielded by veteran John L. Lewis.

The United Mine Workers got a new president last week and the coal operators a new pledge that their friendly relations with the mine union won't be disturbed.

John L. Lewis passed the UMW mantle over to his long-time lieutenant, 72-year-old Thomas Kennedy. Kennedy, in turn, was succeeded in his vice-president's job by W. A. (Tony) Boyle, who now becomes the likely leader of the union when Kennedy retires.

• **No Wage Talks**—Kennedy's first pronouncement on taking over was this: "We will continue peaceful relationships with the coal industry." He added that there is no immediate intention of reopening coal wage contracts, which can be terminated on 60 days notice after Feb. 1. Kennedy holds the office by designation by the UMW board until his formal election by union members next December.

The 79-year-old Lewis, whose last 10 years have been marked by close harmony with the coal mine owners he once fought so bitterly, will still be close to the union. He became president emeritus, at a $50,000 pension that matches the UMW president's salary, and will be on hand as adviser to the union. He also will continue as a director of the UMW welfare funds and will serve on several joint committees with coal operators to promote the future of coal.

• **UMW's New Head**—"Kennedy has lived in John L.'s shadow all these years, but he's a great man in his own right," a UMW aide said of the union's new president a few days ago. Kennedy served four years as lieutenant governor of Pennsylvania, elected in 1934, and has a long and active record in Democratic politics.

Frequently named on government boards, he served briefly as a member of the National Defense Mediation Board and for a year as a member of the National War Labor Board. Policy disputes caused his resignation from both.

Kennedy entered the mines at 12 and joined the UMW soon afterward, in 1900. He has been on his way up in the union since 1906 when, at 18, he attended his first international convention, as a delegate. He became president of an Eastern Pennsylvania anthracite district of UMW four years later, and participated in negotiations that led to the first joint hard-coal contract in 1912. He has been a key figure in all anthracite negotiations since.

In the early days, Kennedy and Lewis competed within UMW for offices and to influence the union on policy matters. The area of disagreement gradually narrowed—then disappeared. The two men became firm allies and friends.

Through the years, Kennedy specialized in the anthracite field, Lewis in bituminous. However, Kennedy stepped in to handle the last soft-coal bargaining when the industry named an anthracite man, Edward G. Fox, as the chief bituminous negotiator. Before that, Fox and Kennedy had negotiated anthracite pacts. With Lewis looking in from time to time, when Kennedy wanted advice, Lewis said, Kennedy and Fox settled quickly and easily.

• **Crown Prince**—"Tony" Boyle, the new crown prince, a one-time Montana miner, was Lewis' special assistant—with an office next to him in UMW Washington headquarters for the past dozen years. Now 56, he has been a specialist on the miners' wage contracts with the industry and on relations with government agencies.

Boyle, who has spurned the spotlight, is the obvious and eventual heir-apparent to Lewis and Kennedy. Tight-lipped and taciturn, he is the antithesis of the bold and dramatic miner who has led the mine union for the past 40 years.

However, he may fit the new mold for a mine union president. Lewis' farewell forecast for coal excluded possible labor troubles and called for more vigorous union-industry cooperation to build up coal as a key fuel. END

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In Labor

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Cost of Living: What's Happening to It

	Total Cost of Living	Food (1947-49 = 100)	Clothing	Housing: Total	Housing: Rent Only
December, 1951	113.1	115.0	108.1	113.9	115.6
December, 1952	114.1	113.8	105.1	116.4	120.7
December, 1953	114.9	112.3	105.3	118.9	127.6
December, 1954	114.3	110.4	104.3	119.7	129.4
December, 1955	114.7	109.5	104.7	120.8	131.1
December, 1956	118.0	112.9	107.0	123.5	134.2
December, 1957	121.6	116.1	107.6	127.0	136.7
December, 1958	123.7	118.7	107.5	128.2	138.7
January, 1959	123.8	119.0	106.7	128.2	138.8
February	123.7	118.2	106.7	128.5	139.0
March	123.7	117.1	107.0	128.7	139.1
April	123.9	117.6	107.0	128.7	139.3
May	124.0	117.7	107.3	128.8	139.3
June	124.5	118.9	107.3	128.9	139.5
July	124.9	119.4	107.5	129.0	139.6
August	124.8	118.3	108.0	129.3	139.8
September	125.2	118.7	109.0	129.7	140.0
October	125.5	118.4	108.4	130.1	140.4
November	125.6	117.9	109.4	130.4	140.5
Dec., 1959	125.5	117.8	109.2	130.4	140.8

Data: Dept. of Labor, Bureau of Labor Statistics. ©BUSINESS WEEK

Over-All Index Drops a Point, But Medical Costs Keep Climbing

The Labor Dept.'s cost-of-living index for mid-December showed a slight drop to 125.5% of average prices over a 1947-49 period; the last index figure was 125.6%, in November (BW–Jan.2'60,p91).

Food, clothing, and apparel prices dropped. **Medical care paced other gains in the index. It continued a steady, sharp rise to reach 153.2%**—to be compared with 147.3% in December, 1958.

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High Court Upholds Ruling That Bars NLRB General Formula on Craft Unions

The U.S. Supreme Court this week refused to review a lower court ruling that, the National Labor Relations Board warned, could have "an unstabilizing effect on existing collective bargaining relations." **In effect, this upset NLRB tests used since 1954 to decide when craft units may be set up for bargaining purposes under the Taft-Hartley Act.**

Under the 1954 policy, NLRB allowed craft units whenever (1) employees within such a group constitute a true craft and (2) the union seeking to represent them traditionally represents employees of that type on a craft basis. In adopting this policy, NLRB abandoned guides as bargaining history and plant's integration.

A test case came up when NLRB allowed the International Brotherhood of Electrical Workers to set up a craft unit of electricians at a Cumberland (Md.), plant of Pittsburgh Plate Glass Co. The board cited its 1954 policy, rejected arguments that Pittsburgh Plate operations were highly integrated and that the company bargained on a plantwide basis with the Glass & Ceramic Workers. Pittsburgh Plate refused to recognize the IBEW craft unit. NLRB sought an enforcement order.

The court ruled NLRB's policy was "arbitrary and discriminatory." It said that under T-H the board must decide in each case what unit is appropriate—it cannot substitute a formula to be applied to every case. NLRB asked the Supreme Court to review this position.

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Rubber Workers Report on SUB Says Plan Is Effective Economic Prop

Idled rubber workers have collected \$3.8-million in supplementary unemployment benefits since mid-1957, when first payments were made under SUB plans negotiated the year before. **According to the United Rubber Workers, the programs now covering 130,000 members employed by 104 companies have demonstrated their "practicability . . . as props to the economy of rubber communities."**

A URW research report on SUB plans shows that 15,000 members—slightly more than 10% of those covered—have received benefits from funds maintained by employers at a cost of 3¢ per man-hour worked.

The first month of benefits, which began in July, 1957, showed a scant \$65 paid out. About a year later, **in June, 1958, a high of \$552,550 was disbursed to rubber workers hard hit by the recession.** Monthly payments in 1959 were heaviest in January, when \$70,980 was paid out; the low for the year, \$24,820, was in September.

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Eight Companies in Taft-Hartley Elections, Including Two in Steel

At midweek, the National Labor Relations Board began polling employees on "last offers" of a number of companies still holding out against steel union demands. If the offers are rejected, workers will be free to strike after Taft-Hartley injunctions run out Jan. 26.

In most cases, **the continuing disputes involve local issues—not basic terms** reached in the steel settlement earlier this month. This was particularly so in two major deadlocks at midweek, between the union and Pittsburgh Steel Corp. and Acme Steel Co.

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Labor Briefs

The International Longshoremen's Assn. will seek a **uniform master contract covering 10,000 dockers in 30 Great Lake ports,** where wages now range from \$1.78 to \$2.55 an hour. Elimination of the 77¢ differential will be a prime goal of 1960 negotiations.

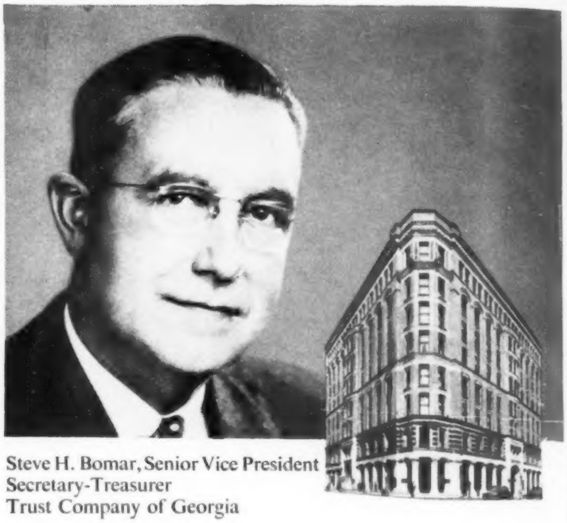
West Coast shipbuilding unions are raising a \$25,000 fund to promote shipbuilding, to be used to gather information on contracts and relative costs of shipbuilding on the Pacific Coast and elsewhere.

These Southeast Decision-Making

WESTINGHOUSE ELEVATOR "30-MINUTE

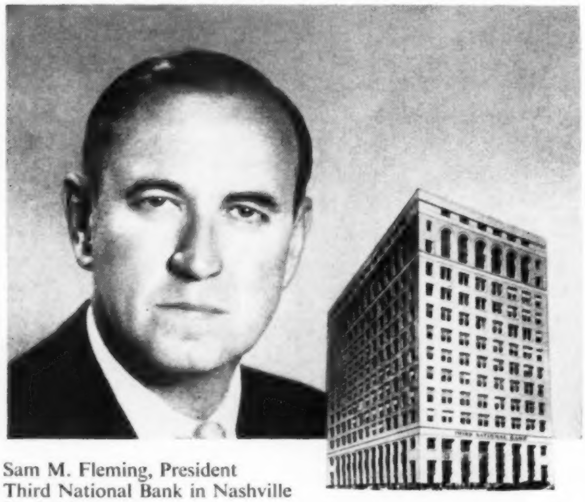
Joe B. Hutchison, Co-owner
Electric Building
Atlanta, Georgia

"Our overriding consideration in selecting the elevator system for the Electric Building was future tenant satisfaction. My associate, Henry C. Beck, Jr., and I, made this our greatest single requisite. After experiencing demonstrations of operatorless elevators, Westinghouse won hands down. We are sure our major tenant, Georgia Power Company, will enjoy the most efficient elevator service available anywhere."



Steve H. Bomar, Senior Vice President
Secretary-Treasurer
Trust Company of Georgia

"Our study of operatorless elevators proved to our complete satisfaction that Westinghouse Selectomatic Automatic equipment was a wise choice for our main bank building. We have obtained safe, efficient elevator service from our installation which handles our heavy traffic peaks smoothly and quickly. We can heartily recommend a demonstration of Westinghouse to anyone interested in automatic equipment."



Sam M. Fleming, President
Third National Bank in Nashville
Nashville, Tennessee

"At the time we were considering modernization of our elevators, we were given behind-the-scenes Westinghouse demonstrations. We were impressed with the smooth operations of the cars, efficient passenger handling and the courtesy of elevators without operators. The Westinghouse reputation for reliability of product and *proof by demonstration* influenced our decision."

R. E. Dumas Milner, President
Milner Enterprises, Inc.
Jackson, Mississippi

"We weren't guessing when we installed Westinghouse in the new Petroleum Building in Jackson, Mississippi. I had already experienced the advantages of its Automatic Traffic Pattern and other outstanding features when, in 1954, we installed Westinghouse elevators in the Milner Building, also in Jackson. This was my first commercial office structure, and it certainly made it easy to say 'Westinghouse' when we planned the Petroleum Building three years later."

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PERSONAL BUSINESS

BUSINESS WEEK
JAN. 23, 1960

A BUSINESS WEEK SERVICE

Curious about the Big Three's new compact cars? About 40% of all showroom viewers are giving the compacts a serious look.

The hot interest, of course, follows the favorable reception of American Motors' Rambler and Studebaker-Packard's Lark.

If the new cars have put you in a buying mood—with second or third car needs in mind—you'll want these driver's-seat pointers:

Over-all, the new American compacts are easy to drive, economical to buy and operate, and surprisingly roomy and soft-riding. Compared with the most popular European imports, the **Corvair** (General Motors), **Falcon** (Ford), and **Valiant** (Chrysler), give you more room, more power, softer comforts—plus automatic transmissions.

But you'll also notice that the American compacts—compared with either their European cousins, or with the big standard-size Detroit cars—are somewhat noisier, and have cheaper upholstery and inside trim. **They also cost quite a bit more than most of their European competition.**

Here are some specifics:

• **Engine. The small, six-cylinder powerplants in the compacts are less powerful than the eight you probably are used to**—you can't get away as fast, or pass as easily, or reach top speed as quickly. But there are plus points, too: **You get high mileage (18 to 25 miles per gal.), spend less on maintenance, and have the added advantage of faster heating-up in cold weather.**

The Falcon and Valiant give you a choice of high-performance or economy-geared rear axles. **And, speaking of economy, the air-cooled Corvair (with engine in the rear) doesn't need water or anti-freeze.**

Corvair, incidentally, has just announced an optional engine with a rated horsepower of 95, compared with 80 for the standard model.

• **Size. On balance, the smaller dimensions of the compacts add up to an advantage, at least, for most drivers.** These models are 10 to 15 in. narrower and 2 ft. shorter than conventional cars, a big plus factor when it comes to moving in heavy traffic and parking. This reduction in size is accomplished with little sacrifice of passenger seating space or over-all comfort. **On the other hand, you may find a disadvantage in the low height of the compacts, especially the Corvair. It's harder to climb in and out, and harder to see around cars and trucks ahead.**

• **Handling. One thing you're sure to like about the compacts is their easy handling, which takes some of the squeeze out of tight traffic.** Steering is easy, and the ride is soft and level with little sidesway. The Corvair may wander a little in cross winds, though less than some of the well-known European rear-engine cars. **The Falcon's steering wheel takes a bit of extra turning to round a corner, and the Valiant's heavier weight makes for slightly less ease in parking** (unless you get power steering).

• **Style. The Corvair, Falcon, and Valiant all offer four-door sedans.** The Falcon also has a two-door sedan, a two-door station wagon, and a four-door wagon, while the Valiant has a four-door wagon in both two- and three-seat models (the third seat facing to the rear). **Corvair has a sporty coupe.** (Both Rambler and Lark offer a wider variety of models.)

• **Luggage. Corvair recently made its optional fold-down rear seat standard equipment, but still suffers in comparison with the Falcon and Valiant, which have roomy rear trunks.** Corvair, with engine in rear, has a front luggage compartment that could be roomier.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK
JAN. 23, 1960

• **Economy.** In addition to good gas mileage and lower delivered prices ($2,000 to $2,500), **used car experts report that the compacts should depreciate less than their bigger brothers**—though this is hard to pin down. **Also, tires are cheaper and should last longer, and batteries are smaller.** The Valiant's alternator electrical system will greatly lengthen battery life.

Another point: **Several leading insurance companies (for example: Allstate, and State Farm Mutual) recently have announced lower rates for compacts—a 10% discount in some cases.**

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To some playgoers, New York's "Off-Broadway" theater, which centers mostly around Greenwich Village, is a sort of medium-quality theatrical curiosity. To others—and this growing list includes nearly all the leading critics—Off-Broadway frequently means top-talent entertainment. Overall, the pitch is "new and different," with a good deal of emphasis on "experimental" theater. It is something that you might find well worthwhile.

Currently, Off-Broadway is boasting several hits including, of course, the musical smash, **The Threepenny Opera,** which has a performance record running into five years (Theatre de Lys, 121 Christopher St.). **Little Mary Sunshine,** a very funny musical satire (Orpheum, 126 Second Ave.), and an alternating dramatic bill, **The Connection,** and **Tonight We Improvise** (Living Theatre Repertory, 530 Sixth Ave.) aren't quite so solid as Threepenny, but are good enough stagecraft to have attracted wide attention among uptown playgoers.

The current runner-up hits on Off-Broadway include **Leave It To Jane,** a Jerome Kern musical originally done in 1917 (Sheridan Square, Seventh Ave. and W. Fourth St.); **U. S. A.,** a brilliant dramatic reading based on the work by John Dos Passos (Martinique, 32nd St. and Broadway); **Orpheus Descending,** by Tennessee Williams (Gramercy Arts, 138 E. 27 St.); **The Three Sisters,** the Anton Chekov classic (4th St., 83 E. 4th St.); **Time of Vengeance,** a highly original play by Ugo Betti (York, 64th St. and First Ave.); and a strong double bill—**Krapp's Last Tape,** a one-man drama, and a forceful two-man play called **The Zoo Story** (Provincetown, 133 MacDougal St.).

Upcoming attractions that look solid are **Parade,** a musical starring Dody Goodman (Players, 115 MacDougal St.) opening in late January; **The Crystal Heart,** a musical starring Mildred Dunnock (East 74th St., 334 E. 74), Feb. 14; **Gay Divorce,** a revival of a 1932 Cole Porter musical (Cherry Lane, 38 Commerce St.) February; **The Trial of Jesus,** an Italian award-winning drama (York, 64th and First Ave.) February; and **Under the Sycamore Tree,** a comedy which starred Alec Guinness in London.

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You still may be able to get tickets to the Ice Arena competitions of the Olympic Winter Games at Squaw Valley, Calif., Feb. 18-28. The reason: Over a thousand more seats have been made available on a daily basis. Ticket prices vary from $15 to $25, depending on the date.

If you plan to attend the games, here are a few how-to-keep-warm suggestions: **For headgear, wear a peaked water repellent cap with earflaps that fold inside; for footwear, galoshes to fit over regular shoes or after-ski boots (usually fur or fleece-lined); for hands,** wool-lined mittens with leather or water-repellent outer covering. **Also, be sure to take suntan lotion and dark sunglasses.** For more information, write to Olympic Winter Games, San Francisco, Calif. (BW—Oct.10'59,p166).

Research tests indicate that negative ions......make

burns heal more quickly,  **with less pain ...produce**

tranquilizing effect on mental patients  **...slow**

growth of lung cancer in mice 

Negative Ions for Everybody?

The amazing array of accomplish-ents above has been claimed by re-archers for one of medicine's newest eapons—negative ions. In scientific xtbooks, these are described as nega-ively charged atoms or groups of atoms aturally found in the atmosphere.

Last week, scientists at General Elec-ic Co.'s Lamp Research Center in ela Park, Ohio, were talking about the evelopment of a new system to pro-uce negative ions synthetically and conomically. Their announcement was e latest outcropping of a continuing terest in the effects of ions on man. n the basis of evidence already ac-umulated, scientists seem at least half nvinced that an atmosphere rich in egative ions can work wonders on all rts of ailments.

Effective on Cancer—Such claims ave been made—and discarded—before. ut in recent tests researchers have me up with hard-to-refute evidence at cancer patients may benefit from heavy artificially produced concentra-on of negative ions. In experiments ith rats and mice, the development te of lung cancer has been cut drasti-lly by placing the animals in cages ntaining a lot of negative ions.

In one series of tests, run by Dr. alter H. Eddy, formerly of Columbia niversity, 60 mice of a breed especially sceptible to lung cancer were sepa-ted into two equal groups. One group as kept in ordinary atmosphere; the her in a room with a high negative n content. At the end of two months, 2 of the 30 mice living in ordinary air ad developed lung malignancies and died. Of the other group only two died; the rest showed no signs of lung cancer.

Nobody is sure just how ions stymie the growth of cancerous tissue. But Dr. Eddy's results are spectacular enough to catch the eye of a number of important medical authorities. The American College of Chest Physicians, to name only one group, has set up a committee to probe the value of negative ions in treatment of lung cancer.

Several companies are also watching the developments closely, in order to be off and running fast if the long-awaited market opens for machines that produce negative ions artificially. Several appliance makers already have incorporated electrostatic ion generators into some air-conditioning sets. Others have lab models under test. The leaders include Philco, General Electric, Westinghouse, Emerson Electric, and Carrier Corp.

• **By a Waterfall**—Some scientists have long suspected that the therapeutic value of negative ions would someday be recognized by the medical profession. Air normally contains a small number of negatively charged oxygen particles. This is especially the case during a thunderstorm and in areas close to a waterfall. Breathing a high concentration of these negative ions may be mildly exhilarating for normal persons. But it sometimes has an almost miraculous effect on asthma sufferers: Within minutes, bronchial tubes clear, and most symptoms of distress disappear.

It has also been well documented that negative ions are effective on burn cases. In some instances, major burns healed in half the normal time when patients were placed in rooms into which large quantities of negative ions had been pumped. A high negative ion count also seems to ease pain in cases of surgery and arthritis. And a series of recent tests on mental patients seem to indicate that the tiny particles act as tranquilizers, too.

• **Varying Results**—In the past, the trouble has been in achieving these results under scientifically convincing standards. The outcome of some experiments was so good as to be almost unbelievable; others, seemingly under identical conditions, produced few—if any—beneficial effects.

So medical circles gradually began to doubt that researchers would ever obtain results conclusive enough to establish negative ions as a reliable treatment tool. Some researchers gave up experiments in disgust.

The change, according to Dr. Rudolph Nagy of Westinghouse's Lamp Div., is simply that today, for the first time, there are machines that turn out a reliable supply of negative ions. Previous units tended to be erratic: Some produced too few negative ions; some even generated positive ions instead which can be detrimental to health.

• **Who Makes Them**—At the moment, among the companies manufacturing devices that produce negative ions are: Philco, Emerson Electric, and Michael Electric Co. of New Haven, Conn. Philco started selling its Ionitron as an added attraction on some air-conditioning units, to aid victims of hay fever and other allergies. Now it's thinking

about raising the ion count slightly and billing the unit as a tranquilizer, too.

Emerson, a later arrival in the field, has introduced an ionization unit employing radioactive tritum and a power supply. The ionizer it markets is manufactured by the Wessix Electric Heater Co. of San Francisco.

Michael Electric, after some early trouble with the Federal Trade Commission on advertising claims for its Puritron, is now selling it as an air purifier.

Westinghouse, GE, and Carrier all have experimental machines to produce negative ions well along in development. But they have not yet decided on full-scale production.

• **How They Work**—Ions can be generated in many different ways, but the negative ion-making machines now known to be under development are all basically similar in principle. All of them use energy to knock electrons loose from some metal substance; these electrons then combine with molecules in the air to become negative ions.

One early experimental model at Westinghouse was an ultraviolet lamp type. Carrier's experimental unit, like the one Philco has on sale, is designed to accompany a standard air conditioner.

GE's latest system operates by exposing aluminum foil to the ultraviolet radiation emitted by germicidal lamps. The energy from this radiation removes electrons from the foil.

• **Studies Abroad**—Interest in negative ions as a potential medical aid isn't confined to U.S. researchers. There's considerable study of the subject under way abroad, especially in Germany and the Soviet Union.

In a trip to Russia, Dr. I. Kornbluch of Philadelphia's Northeastern Hospital discovered extensive use of ion therapy there. New medical students are being trained in the use of negative ions, and more than 100 hospitals and health centers are said to be taking regular advantage of negative ion therapy. Among the maladies treated this way: peptic ulcers, arthritis, bronchial asthma, hypertension, and various types of neuroses. At several clinics in Europe, hay fever sufferers are receiving negative ion therapy.

• **Prognosis**—A good deal of research remains to be done before scientists can explain precisely why negative ions have curative powers.

At Columbia, University of Pennsylvania, Stanford University, and half a dozen other centers of medical research, the search for more information is on. The evidence already in suggests that the trail leads to something big, and despite the long way still to go, there's little doubt in anyone's mind that negative ions will someday be a powerful weapon against disease. END

MOTOROLA

Seaway Made a Slow Start

Traffic fell below predictions as congestion and delays discouraged shippers. But this year, with fewer ships and more cargo, should be better.

At dusk on Dec. 3, the Rockcliffe Hall, a 252-ft. Canadian canaller, cleared St. Lambert lock for Montreal Harbor—the last ship out of the St. Lawrence Seaway in its first year.

This month, the Seaway agencies of the U. S. and Canada announced the Seaway carried 20.1-million tons of cargo —4.9-million tons less than its advocates had forecast—but understandably more than the 11.8-million tons the old, shallow St. Lawrence canals handled in 1958.

• **New Access**—There is no doubt that the Seaway has made an impact on North America. It has permitted large ocean vessels to call at inland ports where only small ones, if any, had called before. It has helped make inland manufacturers conscious of world markets. It has diverted some cargo from Atlantic and Gulf ports—and from the railroad, truck, and barge lines that connect these with the Midwest. To the extent that competition has cut freight rates, exporters and importers could take advantage of savings as a consequence of the Seaway.

• **But a Rash of Ills**—But the Seaway has not drained off a sensational amount of traffic. It has not made a New York of Chicago. In its first year, it has been plagued with problems.

Many ocean ships were inadequately equipped and their crews were insufficiently experienced to navigate the inland canals and locks. The canals and locks, in turn, were not prepared to handle the ships efficiently. The resulting congestion was further aggravated by the shortage of facilities and by inexperienced crews at lake ports, making it hopeless for ship operators to stick to schedules.

When the ice thaws in April and ships steam up the St. Lawrence again, the picture should be improved. Crews, both ashore and aboard ship, will be more familiar with their jobs. Ships will have new equipment they lacked last year, and some locks will be modified. Shore facilities will be expanded.

Some ships will not be back because their owners didn't find the pot of gold they expected last year. As a result, there should be less congestion and better scheduling—and more cargo sent by shippers who avoided the Seaway in its first year while awaiting improvements.

To appreciate the contribution that the Seaway has made to North America's transportation network, you have to remember what it is and what it was intended to achieve.

Ever since the Lachine Rapids turned back Jacques Cartier's expedition up the St. Lawrence in the 16th Century, men have wanted a deep waterway from the Atlantic Ocean into the Great Lakes. From the Atlantic to Lake Superior, the St. Lawrence-lakes system drops 602 ft. The largest single drop, 326 ft., is from Lake Erie to Lake Ontario (around Niagara Falls). The next biggest is the stretch from Lake Ontario to Montreal—the Seaway—where the water level drops 225 ft.

• **Step by Step**—Through the years, the Canadians deepened the waterway on their side, put in several canals with 18 lift locks in the St. Lawrence portion, the Welland Ship Canal with seven locks around Niagara Falls. But the St. Lawrence permitted ships with a draft of only 14 ft.

In 1954, Canada and the U. S. agreed to provide 27-ft. draft and to reduce the St. Lawrence locks from 18 to seven to speed up traffic. Canada agreed to assume 72% of the $471-million cost, building five of the seven St. Lawrence locks, deepening the Welland Canal, and making other improvements.

I. Different Goals

When the Seaway was opened to traffic last year, the beginning was far from a happy one. Ocean ships, with their high superstructures caught in the wind, crashed into the unprotected walls of the Canadian locks. The immense amount of traffic—partly expected because of the eagerness of steamship owners to get in on the first year, partly unexpected because of a late thaw—piled up at the entrance to the Welland Canal, provoking protests that the Canadians should have twinned the Welland locks.

The accidents and delays—which did not occur in the two U. S. locks brought out that the two nations had joined in the huge enterprise with different goals.

• **Lake Bias**—To Canada, the Seaway is above all a deep waterway for large lakers. As one Canadian spokesman put it only half in jest, "We don't care if no ocean ships use it."

The new big lakers would be able to carry grain more efficiently from Lake Superior to Montreal for transshipment to ocean ships, as well as iron ore back up from Quebec. So the Canadian locks were designed with the long, low lakers in mind. As for general cargo, Canada's largest industrial city is Montreal, and it's on tidewater. The few ocean ships that would bring cargo to Toronto were regarded as secondary.

• **Ocean Bias**—But the U. S. Midwest had the ocean ship bug. It envisioned large ocean ships hauling grain directly to world markets, bypassing such traditional transshipment ports as Buffalo. And with its heavy concentration of population and industry—as compared to the Canadian side of the lakes—the Midwest had more justification in expecting ocean ships to bring in general cargo from around the world to its front door, take out its manufactures.

II. Only Partial Success

It is against these two contrasting goals that the Seaway's first year results must be judged. The judgment: Neither country got what it had in mind, but for different reasons.

The total movement of 20.1-million tons through the Seaway proper fell short of the predicted 25-million. The Welland's total of 26.9-million tons (which includes U. S.-Canadian traffic that doesn't get into the St. Lawrence River) was even shorter of its predicted 40-million tons.

• **Strike Effect**—In fairness to the forecasters, the U. S. steel strike had not been expected. It affected iron ore movements in both directions.

Because Canadian mills at Hamilton, Ont., had to switch from Mesabi to Quebec ore, the St. Lawrence gained ore movements at the Welland's expense. Whether movement of ore from Quebec to U. S. mills was significantly cut is not yet known. On the other hand, the strike did cause greater imports of foreign steel products than otherwise would have come up the lakes. No one knows by how much, if at all, it cut U. S. exports via the Seaway.

The Canadian hope to bring huge quantities of grain down from the lakehead was somewhat frustrated. But this was not the Seaway's fault. It so happened that overseas demand for Canada's grain was off.

• **Bulk Cargoes**—Looking at the first year from the U. S. viewpoint, one must distinguish between bulk and general cargo.

Aside from iron ore, the one other

important bulk commodity is grain. As a whole, grain exports through the Seaway started out with a bang—at the expense of Atlantic ports such as Baltimore, Boston, Norfolk, and Philadelphia. But on June 18, the Eastern railroads cut their export rate on grain moving to Atlantic ports by 25%. That brought a considerable share of the grain movement back to the railroads and to the Atlantic ports.

As the year wound up, only Duluth—a traditional grain port—had reason to rejoice. The other lake ports, closer to the Eastern seaboard, had felt the railroad competition.

• **General Cargoes**—Equally significant, and more painful because it is more profitable, was the shortfall in general cargo. Seaway authorities had predicted that general cargo would make up 10% to 12% of the Seaway's total. Instead, it came to only 9%.

Inbound, general cargo's share met the highest prediction—12% of the total. But outbound movements amounted to only 6% of the total. Disappointed port and steamship officials offer several possible explanations: Some manufacturers decided to sit out the first season rather than break traditional shipping patterns, others were willing to try but were discouraged by the delays they heard of, and still others not close to port cities found no advantage in the Seaway.

What discouraged these last exporters was the failure of Western railroads to post a lower export rate to lake ports.

"We can cite a number of instances where good export cargo originates less than 300 miles from a Great Lakes port yet pays a higher rate to a Lakes port than to an Atlantic Seaboard port more than twice the distance away," said Adm. J. M. Will, president of American Export Lines.

III. Did It Save Money?

Long after the novelty has worn off and the testimonials to engineering achievement have been forgotten, it is only the savings it offers that can make the Seaway a success. The route has no monopoly. It is no more nor less than an alternate means of transporting goods.

In its first year, the Seaway did indeed save money for some shippers. A. O. Smith, Willys Motors, and Divco-Wayne Corp., for example, reported savings. Divco-Wayne said it saved \$600 per 100 tons over New York in exporting bus bodies from its Richmond (Ind.) plant.

But other shippers were less than pleased. Even if the freight rate delighted them, they were upset by the delays that inconvenienced them and frequently cost them money. The Grace Line, as an example, had expected to

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make the round trip between Chicago and the Caribbean in 42 days—20 days longer than the New York-Caribbean route. Instead, it took as much as 68.

Several factors accounted for the delays. For one thing, the number of ships that used the Seaway—3,300 of them—was higher than it might have been. Some were attracted by novelty of the first year of navigation, others by the softness of the charter market, persuading many tramp operators to send their ships up the St. Lawrence.

• **Unprepared**—Besides the congestion and accidents on the waterway, there was a snarl in lake ports where facilities and men were not ready—even though cities had had years to prepare.

Of the major ports, only Toronto won unqualified praise. Milwaukee had provided ample facilities, including a heavy-lift crane, but it threw in a regulation that upset the works: Ships were required to use the crane for extremely heavy cargoes, forcing them to make a second stop after discharging other cargo in another part of the harbor.

Detroit didn't have sufficient berthing space. Chicago had two places to call, Navy Pier and Lake Calumet. Many ships decided against using the excellent facilities of Calumet, however, because of the tricky, winding, multi-bridged Calumet River that leads to it. So Navy Pier was often crowded.

• **Tramp Competition**—The added costs imposed by delays were slightly offset by the competition between scheduled steamship lines and tramps. The tramps frequently brought in steel products, cut rates for export cargoes so they wouldn't return to sea empty.

This season, it is generally expected that there will be fewer ships but better schedules. At a meeting last week between the two Seaway agencies and the American Merchant Marine Institute, the agencies did not react to the institute's grievances on improvements of locks and channels, equipment for ships and locks. But already Canadians are making improvements in the Welland Canal. Some of the ports are continuing their expansion programs.

At the same time, competition for the freight will be more keen. In the wake of 10% ocean rate increases posted by lines calling on the Atlantic, the conferences of lines of the lakes are likely to raise their rates, too. They seem to feel that tramps lost too much money last year to come back.

• **And Railroads**—The Eastern railroads won't be idle. Right now they are studying whether to cut rates on about 20 items of general cargo such as cars, farm implements, and meat products. They saw how the cut in grain rates won grain back for them in great volume, and they figure they would also divert from the Seaway the more profitable general cargo. END

In Production

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Color Slides and Tape Recordings Supplant Blueprints at Hughes Plants

Hughes Aircraft Co. has developed a system for giving simultaneous audible and visual instructions to workers on its own assembly lines for complex electronic components. **The system, called Video-sonics, supplants blueprints and oral instructions.** And, says Hughes, it does it better than the ears-only system developed by Westinghouse and Dictaphone (BW–Jun.14'58,p70).

At each worker's station is an automatic 35-mm. slide projector, a small screen, a magazine of 35-mm. color transparencies, a magnetic tape recorder with a magazine of pre-recorded tape, and a set of earphones.

Each time the worker performs an operation, Video-sonics shows by color slides how the work should be performed and how the unit should look at this stage of assembly. The synchronized tape gives oral instructions. After each step has been described, there's an interval for the operator to carry out the work, then a "beep" to warn that the next instruction is about to come. The slides change automatically, but the worker can speed up or slow down the unit to match work speed.

Hughes has installed more than 1,000 units at its own plants. It will offer the Video-sonics idea to the military services, but not to other companies as yet.

According to Aviation Week, a McGraw-Hill publication, **Video-sonics has enabled Hughes to slash defect rates by as much as 100 to 1, while increasing output.** Formerly, Hughes says, even experienced operators using blueprints and oral instructions could achieve only about 60% of the optimum work standard set by production planners. Now almost every operator can maintain 90% to 100% of the standard throughout the shift.

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Du Pont Plans Full-Scale Production Of Photosensitive Printing Plates

Du Pont will build a full-scale plant to produce its photosensitive plastic printing plates (BW–Oct.11'58, p94). This brings to an end 10 years and \$6-million worth of research and development on a major improvement in printing technology.

A printing plate is the master surface from which printing is done. Conventionally, in letterpress—printing from a raised surface—a plate is made by taking a mold of the lead type and engravings that make up a page and making a heavy metal casting from this mold. These plates are hard to handle, expensive to ship, and may take five hours or more to make.

Du Pont's "Dycril" plate, in contrast, is light, easy to handle and can be made in 20 to 50 minutes without any hot metal, since neither lead type nor plate casting is necessary. The plastic plate is exposed like a photograph with a negative of the page to be printed, but instead of a black and white image you get a relief image. Dycril's initial price of \$10 a sq. ft. is still higher than most ordinary plates, however.

The plates will be turned out by a new unit at du Pont's photo products plant in Parlin, N. J. **It will produce 1-million sq. ft. of plates per year when completed in mid-1961.** Meanwhile, the capacity of existing pilot facilities at Parlin will be doubled.

Du Pont will sell unexposed plates directly to users and also to trade shops which will process them for printers, advertising agencies, and others. Other companies have different types of plastic plates under development.

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Electrical "Fence" Proposed by GM As Warning That a Car Is Veering

The latest scheme for automating traffic safety is a buzzer system developed by General Motors Research Laboratories to warn motorists when they're getting too close to the edge of the road.

It requires burying a wire on each side of a traffic lane. The wire carries a low frequency signal (2 kc), creating what amounts to an electrical fence. Cars would have ferrite-core coils hanging from each end of the front bumper; when the car veered, one of the coils would come within two or three feet of a wire and pick up an electrical signal that would be boosted by a transistor amplifier to actuate a buzzer on the dashboard.

The coils might be made first as hang-on units to be put on a car at a turnpike entrance and removed at the exit, GM suggests, or might eventually be built into vehicles as optional or standard equipment.

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Tough and Talented New Resin Due Soon in Commercial Quantities

Polycarbonate resin, a remarkably tough thermoplastic, will be available in commercial quantities this spring from a new Mobay Chemical Co. plant in Martinsville, W. Va.

The material—which is also produced by General Electric Co.—has attracted considerable interest among makers of plastics products because of its toughness, stability at extremely low temperatures, high softening point (290F), and good electrical insulation properties. The plastic can substitute for metal in many applications, and can be fabricated by a number of methods, including injection molding.

Mobay has formed a new subsidiary, Mobay Products Co., just to handle the new resin, which will be sold under the trade name Merlon, at an introductory price of \$2.50 per lb. The plastic comes in powder and pellet form, and ranges in color from light to dark amber. Mobay claims that eventually it will also have a water white material.

Patents for Merlon resin are held by Bayer, the German company that shares ownership of Mobay with Monsanto Chemical Co. Both Bayer and GE have filed for patents in the U.S. for polycarbonate resin and the two companies have executed a cross licensing agreement.

NEW PRODUCTS

Satellite Dictating

One central recording device, handled by a secretary, can receive dictation from five remote "mikes."

A new wiggle in dictating machines has been developed by Soundscriber Corp. Called the Satellite system, it enables up to five executives to dictate into microphones remote from a central recording device. Thus, they don't need to bother with manipulating the record, which is handled by a secretary in the course of her regular duties.

The simple microphone unit on the executive's desk has remote controls that allow him not only to play back his last few words, but also to scan the entire disk for earlier dictation, a new feature in remote dictating, according to Soundscriber. A memory unit on the central recording device then returns the needle automatically to the point where his dictation ended.

• **Allure**—Soundscriber feels the Satellite system will attract businessmen who don't use dictating machines because they seem too complicated and require interrupting the train of thought to fiddle with the record. The company estimates that 8 out of 10 non-users belong in this group. Soundscriber also expects the system to appeal to companies that want centralized dictation for small groups—either instead of, or in addition to, present systems of central dictation through lines to a giant recording pool for a whole company.

Basic components of the system are the Satellite microphone and playback unit, priced at $95; the master communicator recording device, $330; and a new transcribing unit for the secretary, $380. Soundscriber records can be played on any 33⅓ rpm. turntable.

Battery-Powered Trucks Make Production Debut

The electric truck business, traditionally low-voltage, may get a jolt from four new models that Cleveland Vehicle Co. of Cleveland, Ohio, put into full production this month for multi-stop deliveries.

The new models range in payload from 1,500 lb. to 3,000 lb., and in chassis and body weight—excluding batteries—from 1,418 lb. to 3,500 lb. Cleveland Vehicle guarantees the Exide batteries in the trucks for 2,000 recharging cycles or 100,000 mi. This comes

to 6⅔ years if the truck is driven 50 mi. per day on a six-day week.

• **Higher First Cost**—Prices for the batteries range up to $2,856 for the big 3,000-lb. unit that goes in the heaviest van-type truck. Add this to the price of the truck itself, and the investment is about double the cost of a comparable gasoline-powered vehicle. A motor regenerator set or silicon rectifier for recharging the battery raises costs another $500-$800, unless it's rented. Cleveland Vehicle claims, however, that the electric truck's longer life and pinch-penny operating economy offset the added expense.

The company also claims its electric units offer quicker acceleration and braking, greater simplicity of controls, and lower insurance rates than conventional trucks, as well as uninterrupted fumeless, noiseless operation.

However, the need for battery recharging each 60-80 mi., the sluggishness of battery trucks on hills, and their comparatively low speeds (25-30 mph.) seem likely to limit their use.

NEW PRODUCTS BRIEFS

A product development department at Chase Brass & Copper Co. will help customers solve their new product problems—including design, material selection, market planning, and development of new applications. The new department will use the facilities of Chase's metallurgical and research and development departments, but will not duplicate their function. This kind of arrangement has already proved profitable to the other metal industries.

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Rice hulls are producing a variety of new materials in a long-term Canadian project. New processes for combustion of rice hull ash produce a refractory material that can withstand temperatures of 3,000F, a thermal insulator, an abrasive material, and a plastic filler. Another technique produces a high-porosity material for filter plates that is also used as an additive for cement and concrete. Ontario Research Foundation, Toronto, is the developer.

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Insecticides mixed into a new line of paints produced by a British company give up to two years of bug protection. The insecticides remain in the coating even after repeated cleaning and are slowly released to the surface. The paint is not toxic to humans or animals, but it's fatal to flies, silver fish, cockroaches, moths, and other creeping, crawling, and flying pests. It is available in white, colors, and as a clear lacquer that can be used on plain woodwork. The manufacturer is Leyland Paint & Varnish Co., Ltd.

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Fiction Writers Tackle the Steel Strike

It was a "sell-out," a "campaign contribution," a "deal"—these and other harsh words are being applied to the steel settlement two weeks after its announcement. They come from people who don't like the settlement or the way it was made.

They show just how rapidly men can create a fiction to cover a distasteful fact. The settlement, it is true, was made under the leadership of Vice-Pres. Nixon and Secy. of Labor Mitchell—but there's no evidence whatsoever that they did or could coerce either side.

The two government leaders had a direct interest—the U. S. simply could not afford a resumption of last year's 116-day strike. It had made too much of a dent in the economy (page 2).

The industry was in no position to hold out for better terms. It faced a union that was gaining strength and sure to win a smashing vote from its workers against acceptance of the employers' last offer. It also faced a Congress that was coming back in no mood to let a renewed steel strike disrupt the economy indefinitely.

The union, on its part, backed down considerably from its original demands. The result was a contract more favorable than the companies had won in the past, and far more favorable on many points than the union's final demands (BW—Jan.16'59, p106). All in all, the industry was fortunate to bail out as well as it did.

Much more important than the political sidelights is the question of whether or not the contract is inflationary. Here again, the only way to appraise the settlement is to ask what the alternatives were.

The strike itself was inflationary—it has left us with the prospect of a year in which demand for steel will be very high, a year when the market automatically will be putting pressure on prices.

But the terms of the settlement are such that the nation may be able to call itself lucky. It won't be possible to put down a final judgment on the inflationary question for at least a year. But it is clear now that the contract will not lead to immediate, across-the-board price rises.

This steel contract has three important advantages over its predecessors. First, it brakes the cost-of-living spiral. Wages cannot go up more than 3¢ an hour in a year—and may not go up that much—to compensate for increases in the cost of living. This takes much of the threat out of automatic escalation, something which had been a growing concern to management and to economists.

Second, the contract gains time. The industry does start paying insurance costs immediately. But there are no retroactive increases in wages and the actual increase in hourly wages—8¢ to 9¢—does not take effect until Dec. 1. Steel has a backlog of technological advances it can put to work—and it has a year in which it should be able to raise productivity to cover most if not all of its added costs.

Third, both the industry and the union are committed to helping raise productivity.

In addition, there is a tacit understanding that the industry will not raise prices this year. From the nation's viewpoint, this is a powerful weapon against inflation. It will carry the industry through the critical period created by the strike—a year in which steel users will be fighting to rebuild their stocks. By the end of 1960, the climate may be different—and the steel industry may feel that it does not need to, or cannot, raise prices.

Clearly these things make this steel contract better than earlier settlements. With them, it may turn out that this contract has relatively little inflationary impact. Certainly—and this is the big gain—it is not automatically inflationary.

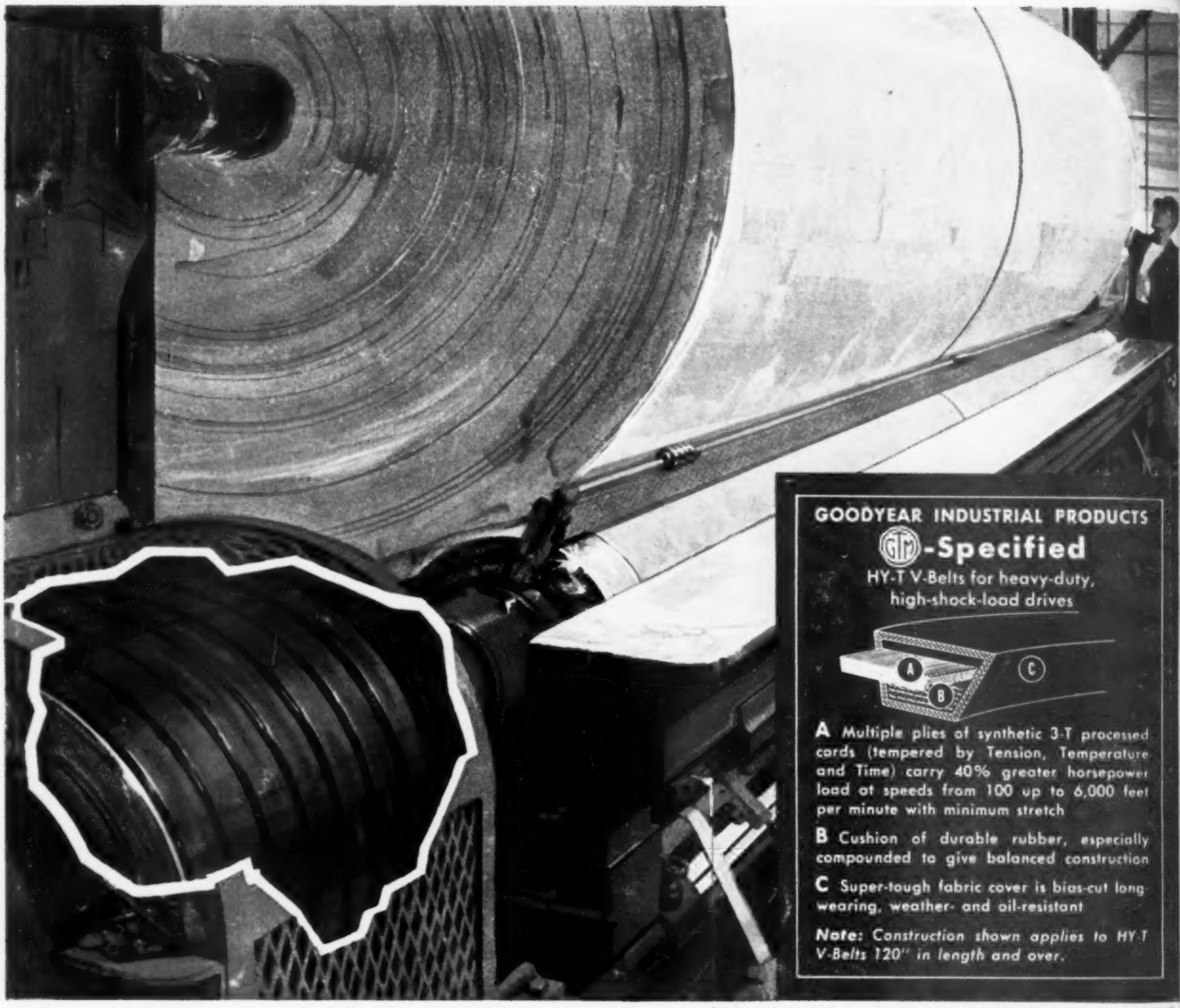
Upgrading TV

WNTA-TV's Play of the Week, consistently among the very best adult television entertainment in the New York metropolitan area, has found a commercial sponsor. Standard Oil Co. (New Jersey) has agreed to pick up the tab for the weekly drama series on a 13-week basis.

Congratulations are in order for a number of groups, including WNTA; the 28,000 listeners who supported the program by letters; the advertisers who gave tentative support to The Play of the Week during its first 14 weeks; Jack Gould and the New York Times which led an informal campaign to keep the program alive.

But Jersey Standard, its president, M. J. Rathbone, and its agency, Ogilvy, Benson & Mather, deserve special commendation for a couple of reasons. First, of course, is for deciding to sponsor such a show. Just as important is the role that Jersey has defined for itself as sponsor. It has announced that it will keep hands off the program's content. And it will make commercials subordinate to the play, fitting them in only where a natural dramatic break occurs.

The publicity that Jersey Standard already has received is in itself worth the half-million dollars the company is paying. People who fervently want commercial TV used for purposes better than in the past certainly will not grudge this benefit to a company smart enough to see the initial advantages of sponsoring good but limited-audience programing. And they can hope that Jersey Standard will put equal value on the advantages of following through with the idea by continuing its support of this sort of program beyond the 13 weeks of the contract.


GOODYEAR INDUSTRIAL PRODUCTS
G.T.M.-Specified
HY-T V-Belts for heavy-duty, high-shock-load drives
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B
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A Multiple plies of synthetic 3-T processed cords (tempered by Tension, Temperature and Time) carry 40% greater horsepower load at speeds from 100 up to 6,000 feet per minute with minimum stretch
B Cushion of durable rubber, especially compounded to give balanced construction
C Super-tough fabric cover is bias-cut long-wearing, weather- and oil-resistant
Note: Construction shown applies to HY-T V-Belts 120" in length and over.

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